1	IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN			
2	SOUTHERN DIVISION			
3				
4	In Re: NEO WIRELESS, LLC,) Civil Case No. PATENT LITIGATION) 2:22-md-03034-TGB			
5				
6	MARKMAN HEARING			
7	BEFORE THE HONORABLE TERRENCE G. BERG UNITED STATES DISTRICT JUDGE HEARING CONDUCTED VIA VIDEO CONFERENCE ALL PARTIES APPEARING REMOTELY Wednesday, June 21, 2023			
8				
9				
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 3
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                             Paul Steadman
 4
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Wednesday, June 21, 2023
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              10:06 a.m. EST.
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 3
              THE LAW CLERK OF THE COURT: Hear ye. Hear ye. Hear
 4
         The United States District Court for the Eastern District
 5
    of Michigan is now in session. The Honorable Terrence G. Berg
 6
 7
    presiding.
              All ye having business before the Court, draw near,
 8
 9
    give attention and ye shall be heard. God save the United
    States of America, and this Honorable Court.
10
              The Court calls case number 22-03034, In Re: NEO
11
    Wireless, LLC, Patent Litigation.
12
              Counsel, please place your appearances on the record.
13
              MR. STEWART: Good morning, Your Honor. Chris Stewart
14
    for the plaintiff, NEO Wireless.
15
              Also speaking today with my firm on behalf of NEO
16
    Wireless is Hamad Hamad and Bjorn Blomquist. They'll both be
17
    using the same window whenever they speak.
18
19
              THE COURT: Well, good morning to you, Mr. Stewart,
    Mr. Hamad and Mr. Blomquist. And --
20
              MR. STEWART: And I apologize, also -- I'm sorry, Your
21
    Honor.
22
              I meant to also introduce Mr. Cassady, our lead
23
    counsel. He's also present. He has to travel today to a
24
    pretrial hearing out of town tomorrow morning. So he might not
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be able to remain for the entire hearing, but he is present in
 1
 2
    the room now.
              THE COURT: Thank you.
 3
              And welcome, Mr. Cassady, as well.
 4
              So let's go through our defendants here. So I'm just
 5
    looking at the docket. So how about for Honda?
 6
 7
             MR. CORDELL: Good morning, Your Honor. It's Ruffin
    Cordell and John Johnson on behalf of Honda from Fish &
 8
    Richardson.
              THE COURT: Mr. Cordell, Mr. Johnson, welcome.
10
              And from Ford?
11
             MR. LeROY: Good morning, Your Honor. This is
12
    John LeRoy from the firm, Brooks Kushman for Ford. And with me
13
    today as well is Kyle Konz, K-o-n-z.
14
              THE COURT: Mr. LeRoy, Mr. Konz, welcome.
15
              How about for Volkswagen?
16
         (No response.)
17
              THE COURT: Do we have anyone from Volkswagen?
18
19
              THE CLERK OF THE COURT: I'm seeing two hands that
    have been raised. Let me admit them as panelists.
20
2.1
              MR. MILLIKEN: Good morning, Your Honor, William
    Milliken from Sterne Kessler Goldstein & Fox on behalf of
22
    Volkswagen. I had not intended on speaking today which is why
23
    I was not previously on video.
24
              THE COURT: I understand. Well, welcome to you,
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Mr. Milliken.
 1
 2
              MR. MILLIKEN: Thank you, Your Honor.
              THE COURT: Very good. Let's see. How about for
 3
    Toyota?
 4
              MR. ERICKSON: Good morning, Your Honor. Brian
 5
    Erickson and Ankur Desai with DLA Piper for Toyota.
 6
              Also joining us as an observer is Paul Steadman with
 7
    DLA Piper.
 8
 9
              THE COURT: Good morning, Mr. Erickson.
              And let's see here. How about for GM?
10
              MR. HERRIGES: Good morning, Joe Herriges from Fish &
11
    Richardson on behalf of General Motors. And with me is James
12
    Huquenin-Love, who also will be representing today.
13
              THE COURT: Welcome, Mr. Herriges and Mr. Love.
14
              Do we have someone from Tesla?
15
16
         (No response.)
              THE COURT: How about from Nissan?
17
              MR. HILL: Good morning, Your Honor. This is Reggie
18
19
    Hill with Jenner and Block on behalf of Nissan, the Nissan
    defendants. I also have my colleague, Peter Brennan, on the
20
    screen with me.
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22
              Separately, my colleague, Paaras Modi, M-o-d-i --
    Paaras is P-a-a-r-a-s -- is controlling the slides. I'll be
23
24
    doing some of the speaking during the course of the hearing.
25
              THE COURT: Very good. And welcome to you as well.
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We don't have Mercedes-Benz anymore. 1 2 How about for FCA? MR. TAPPARO: Good morning, Your Honor. Robert 3 Tapparo of Venable for FCA. 4 THE COURT: Good morning, Mr. Tapparo. 5 Let's see. Is there any other defendant who I have 6 not mentioned? 7 MR. JARVIS: Good morning, Your Honor. This is 8 9 Lawrence Jarvis for Tesla. I was not a panelist when you 10 asked. I was just promoted. I wasn't planning on speaking today and I was not a panelist when you initially asked. But 11 this is Lawrence Jarvis on behalf of Tesla. 12 THE COURT: Very good. And welcome to you as well. 13 MR. JARVIS: Thank you. 14 THE COURT: All right. So, good morning. We have our 15 claim construction hearing on the docket and I'm going to be 16 hearing from both sides in this matter. 17 I think you've probably received our preliminary 18 19 construction that was sent out last night that we've been working on here and I wanted you to know that that preliminary 20 construction is just that, it's preliminary. I don't want you 2.1 22 to think that it represents in any sense a final judgment or decision by me regarding what the construction is that we 23 24 should apply to these terms. But I thought it might be helpful to give you a sense of how it currently sits with me after 25

2.1

having looked it over and reviewed the materials. Because I thought it might help you to focus your arguments. Don't feel in any way that you're stuck with what I have in there, but let it be a representation of the fact that I have looked at this, I've given it some thought and we can get a sense of perhaps how I view the issues at this stage without having had the benefit of oral arguments through your presentations today.

I did want to thank a couple of people. I want to thank our intrepid court reporter here who is going to be hearing all these technical terms and getting them all down accurately. I know you'll assist her regarding that and I thank you in advance for that.

I want to thank Mr. Woloson, of course, our technical advisor, who has been rendering invaluable service to the Court and I'm very greatful for his assistance in helping me to grapple with this area, which is very unusual and technical and takes a lot of digestion and consideration and reading to try to feel like we can get a grasp on what these terms are and what the technology is.

I want to thank also Mr. Weissburg, who is our law clerk, who is present today as well.

So you know you've each got about an hour and a half today to go through the materials. We would like to proceed in the order of the terms that we have presented in our proposed construction to you.

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So I thought it would be a good idea and you probably saw in the E-mail that Mr. Woloson sent out last night that each of you should be given the opportunity to decide who you think should go first with these terms.

And how much time you think you'd need for them. Now

And how much time you think you'd need for them. Now at first I see that you did agree to an interpretation of the term "configure to". The terms "configure to" that are contained in, I think, all the patents. So we don't need to address that.

The next disputed term that we have is from the '366 patent. It's in claims 1 and 17 and that phrase that we're talking about construing here is, quote, the ranging signal exhibits a low peak-to-average power ratio in the time domain, closed quote.

So which side here, plaintiff or defendant would like to go first regarding this set of terms?

MR. HERRIGES: Good morning, Your Honor. This is Joe Herriges for General Motors. The parties have agreed that we will proceed first on this particular claim as we are challenging its definiteness and NEO will proceed first on the remainder of the claims at issue.

THE COURT: And how much time do you need, Mr.
Herriges?

MR. HERRIGES: I would expect on the order of 15 to 20 minutes, Your Honor.

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THE COURT: All right. So that's a pretty hefty
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    amount in light of the time available, but this is perhaps one
    of the knottier questions. So as long as you all know that
 3
    both sides gets or needs about that much time, then that does
 4
    take a chunk out of our hearing time today. But if that's what
 5
    you think you need and if it's acceptable to both sides, then
 6
    we can go ahead with that and we'll be relying on Mr. Weissburg
 7
    to keep time.
 8
              So why don't you go ahead and I'd be happy to hear
 9
    your oral arguments.
10
11
              MR. HERRIGES: Okay. Let me share my screen here,
    Your Honor. Just make sure you can see it.
12
         (Slideshow displayed and shown throughout presentation.)
13
              MR. HERRIGES: Your Honor, are you able to see the
14
    slides now?
15
                          I can. Go ahead.
              THE COURT:
16
              MR. HERRIGES: Wonderful. So as Your Honor said,
17
    we're going to start here with the '366 patents and the term at
18
19
    issue here really focusses on these words "low peak-to-average
    power ratio in the time domain."
20
              And I skipped ahead to Slide 11, where we're really
21
    focusing on that.
22
              We've got here on Slide 12, just to put a little
23
    context, this is where the claim language appears in claim one.
24
              But, again, moving to Slide 13, the key issue here is
25
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really on this term "low".

The key dispute, which we have highlighted on the bottom of Slide 13, is "whether the intrinsic record provides objective boundaries for a 'low' peak-to-average power ratio."

Our position, defendant's position, is the answer to that question is no and the term is otherwise not one that is readily understood in the art and is, therefore, indefinite.

NEO, on the other hand, proposes two alternatives. They propose a plain and ordinary meaning but without indicating what that meaning is. And then they propose an alternative, specific measurements, of -- and this is, if you go to the very bottom here a peak-to-average power ratio of 9dBs, or decibels, or less, which it pulls from the extrinsic Baxley and You articles.

There's really three important points that I want Your Honor to take away from my presentation this morning. And I'm going to take them in order. But they are first that the intrinsic record does not provide any objective boundaries and I don't think we're going to hear any serious argument from either side that they admit it does.

The second point, Your Honor, is when the PTO focused on this limitation in related patents, it either found it indefinite -- or excuse me.

It did find it indefinite and NEO either acquiesced to that finding by abandoning the application or removing this

2.1

specific claim limitation in order to obtain allowance.

And the final point, Your Honor, is that the extrinsic evidence that NEO seeks to use here is irrelevant as a factual matter and also legally improper because they seek to incorporate specific measurements from extrinsic evidence, which the federal circuit has, as a matter of black letter law, said you just can't do in claim construction.

So with that in mind, Your Honor, I want to turn to sort of threshold issues in the case law. And I have on Slide 14 here the sort of key case, which is the *Biosig versus*Nautilus matter, where the Court makes clear "when a word of degree is used, the court must determine whether the patent provides some standard for measuring that degree."

And I think one thing the parties do agree on here is that when we're talking about low, there's no dispute that that is a word of degree. And so within this Universe of Nautilus, we're determining whether the intrinsic record provides guidance on that term.

More specifically, I think the *Berkheimer* case is an important one to focus on where, as you see on Slide 15, we've highlighted a couple of important facts here. The term at issue there was that the "archive exhibits minimal redundancy."

So, again, a term of degree, minimal. And the federal circuit made clear that the question is not what must exhibit minimal redundancy but rather how much is minimal.

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And I say that's important here because we hear a lot from NEO that there's an understanding that you would compare the baseline to the reduction in order to determine whether something was low. And what *Berkheimer* tells us is that that's not the relevant question. The relevant question is how low is a low PAPR.

I'll be very brief on the sort of technical aspects of this, Your Honor. But when we're talking about PAPR -- and we laid this out in the technology tutorial -- essentially what that means is, when you put off a signal, it has an average power and it has a peak power. And the peak is -- those are sort of the highest points indicated by the red line on Slide 16 in that right graphic. And the average power is indicated by that black line.

And the peak-to-average power is expressed as a ratio of decibels between that red line and that black line.

All right. So starting with the first important point that I said I was going to make at the outset. And that is, when we're talking about the intrinsic record here and what the intrinsic record provides, what you see on Slide 17 is it.

What the intrinsic record says is limited to this paragraph in the specification that relates to the time-domain signal exhibiting a "relatively low peak-to-average power".

And it goes on from there to say that this can result in improvements in power efficiency of the mobile station

transmission power amplifier.

2.1

But importantly, it doesn't say what constitutes low. It doesn't provide any formula or any way to calculate from an objective standpoint what constitutes low nor does it articulate what would constitute an improvement or how much improvement would be achieved by reaching the undefined low quality that the patent speaks about.

And we have a good degree of expert testimony on this, Your Honor, from both sides. What we hear from Dr. Axl, defendant's expert, on Slide 18 is, as we cite in our brief, "This disclosure does not clarify what the '366 patent considers low PAPR." And indeed, adds additional uncertainty by using phrase -- using additional terms of degree like "relatively" and "improved" which are also undefined.

Of equal important, as I move to Slide 19, this is not a term -- you know, you could imagine a patent might not define every single term because some terms may be known in the art. This is not one of those terms. The word "low" in reference to PAPR is not -- as our expert Dr. Axl says here, it's not used generally or in the context of the ranging signal. There's no industry standard for making that assessment.

I'll move through this next slide relatively quickly.

But we also have testimony in the record here from an expert

who submitted a declaration, Mr. James Proctor, on behalf of

the Dell defendant who NEO had sued earlier and settled with

1.3

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before the claim construction issue was resolved. But nevertheless, as you see on Slide 20, indicating the same thing as Dr. Axl does that there is no consensus threshold -- if you look at paragraph 23 there, which we've highlighted.

"There is no consensus threshold defining what peak-to-average average power ratios constitute 'low.'"

We turn to what NEO has to offer. I think this is of equal importance. We talked both about what it means to be low, but we also talk about where the baseline is. And even NEO's expert concedes that there is not some defined baseline from which we can determine whether a deduction has been low. As he says in his declaration there are "different specific implementations of these networks at issue that could have different baseline PAPRs."

And that's consistent with what Dr. Axl says in paragraphs 37 and 40 of his declaration where he says that a baseline PAPR can be as high as 24 decibels.

Your Honor, moving to the what I think is the second important point here. When the patent office focussed on this claim language, this specific claim language in other applications, in other related applications, it found that it was indefinite.

You can see here in the *Child* application of the '366 patents, the patent office specifically says that a low peak-to-average ratio is indefinite as it is unclear how low

the ratio should be to be considered, quote, low as claimed.

So that's independent from any arguments we're making, which is the patent office making that determination. And then we see here NEO doesn't fight this issue.

Moving to Slide 23, I've got on the left of Slide 23 an amended claim. And what they did in this amended claim is they deleted that very language. They deleted this language is in acquiescence with the PTO's order and were able to get issuance only after deleting that language.

We see a similar thing in the '677 application, which we also talk about in our brief. Where, again, on Slide 24, we've got here a final rejection from the patent office where in that second highlighted portion, the patent office says "it is impossible to identify which results of the autocorrelation are considered 'high' and which are considered 'low.'".

And here NEO subsequently abandoned this application after the patent office made this determination.

I've gotten here just a sort of summary slide on Slide 25, Your Honor, just to put a little timing context into this when the specific applications were filed, when the rejection occurred and when the abandonment or the amendments occurred. And I think an important thing for Your Honor to consider is the timing of the *Nautilus* decision which is what is governing us here, changing the standard from insolubly ambiguous to reasonable certainty.

And you can see that the abandonments happened after the *Nautilus* decision and the removal of the "low" PAPR happened after the *Nautilus* decision. So that's -- so those things happened after the operative case law that we are sort of arguing about here was put into place.

Your Honor, the third and final point I want to make is with regard to the extrinsic evidence that we see from NEO. And just to set the table a little bit, the federal circuit in the case I have on Slide 26, and many, many others, has said that "it is improper to import a limitation into a claim where the limitation has no basis in the intrinsic record."

And that's really what NEO is trying to do here.

There is no accepted definition of ER. There is no indication, any intrinsic record how low needs to be low to be considered low within the claims. And so what we see on Slide 7 (sic) what NEO does is they go out and they find a couple of articles, academic articles, and take the reduction in PAPR that those articles were able to achieve from a theoretical standpoint, and they try to read it into the claims.

So they say here on Slide 27 that a skilled artisan would understand the relevant difference in PAPR of 3dBs for a reduced PAPR to be low in the context of the patented claims.

So they don't cite to anything intrinsic. They don't cite to any sort of standards or any sort of governing definition. They cite to this Baxley and this You article.

And as a threshold matter, this is textbook reading in of extrinsic evidence that has no basis in the claims.

But even more than that, these articles are really irrelevant as a factual matter. What these articles are about, Your Honor -- and I'm not going to get too deep into the weeds.

But there is a goal in the Baxley article to figure out theoretically how to use certain mathematical techniques to reduce PAPR as an absolute matter.

You know, if we increase the multiples -- if you're looking at Slide 28 on the left there. If we increase the number of times we multiply against the data from one to 10, what happens? Well, what they found out is you see a reduction in PAR across the board at different error rates. But in no way are they saying that this PAR reduction that they were able to find in this theoretical article is somehow governing of the standard more generally or governing the way the '366 patent approaches this. They're simply indicating that they were able to lower the PAR using certain techniques. Not that this constitutes a, quote, low PAR or that a skilled artisan would understand that.

In fact, when you go sort of up the chain here from -if you've got 10 to the negative four. And if you go up 10 to
the negative one, the reduction actually changes over time. So
it's not as if we can say that a 3dB reduction or a reduction
from 12 to 9 is something that's an objective boundary.

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Because even looking at what they've provided, that boundary shifts depending on the input and that's not something that is consistent with reasonable certainty.

You see here, moving to Slide 29, again, Mr. Axl disagreeing with Mr. Alberth that his publication would have informed a skilled artisan about the meaning of low PAPR in the context of the '366 patent.

The You article, I'm going to spend a little bit less time on this, Your Honor, just for the sake of time, it's simply because it suffers from the same deficiencies as Baxley. The same issues apply here. It's a theoretical technique that uses a different system than the claims system and it's based on a series of assumptions that are theoretical and not trying to say as an absolute matter what constitutes low, what percentage of baseline constitutes low, where to start to determine whether something is low. That's nowhere in the Baxley article. It's purely extrinsic and purely theoretical.

And again, moving to Slide 31 we have the same testimony from Dr. Axl on this point that we saw with respect to Baxley.

Your Honor, I think the point I really want to close on here is what NEO is providing here is really a false choice with no suitable outcome under their framework. On the one hand, they're arguing that plain and ordinary meaning should

2.1

apply, but they don't say what that plain and ordinary meaning is and I don't think there is any serious argument that there is a plain and ordinary meaning here for defining what low is in the art and because of that they're forced to pivot to an alternative, which is equally flawed and equally counter to black letter federal circuit law.

And that is they're seeking to read in these very specific measurements from the extrinsic evidence and that is textbook flawed logic from the context -- or from the point of reading in extrinsic record. Nothing in the extrinsic says anything about 9dBs or less being the threshold for low.

The only place you're going to see that is in the extrinsic record, which as I've said earlier, does not even provide a factually relevant framework for determining what this term means as the '366 patent uses it. And for that reason, Your Honor, we would urge you to find that it's indefinite.

THE COURT: Well, thank you very much, Mr. Herriges.

A quick question for you. With respect to what a person of ordinary skill of art would think about this term. Do you see that as a factual question that the skilled artisan would decide?

MR. HERRIGES: I don't think here it's a factual question because I think the only evidence of record that a skilled artisan would know that -- when determining whether

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something is low you are making a comparison between a baseline
 1
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    which to be clear is undefined and the particular system at
    issue. I think that's the only sort of thing a skilled artisan
 3
    would understand and I don't think there's a factual question
 4
    about that particular issue. I think we would agree with that.
 5
    The problem is that there is simply -- there is no evidence
 6
    that there is any particular baseline from which to make that
 7
    determination or any threshold as to how low is too low.
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 9
              So I don't think it's a factual question there because
10
    there's simply no evidence to support what NEO is saying here.
    I think it's a legal issue of deficiency of anything at all
11
    that would lead to reasonable certainty.
12
              THE COURT: All right. Thank you very much, sir.
13
              MR. HERRIGES:
                             Thank you, Your Honor.
14
              THE COURT: So who would like to respond to this with
15
    respect to the plaintiff?
16
              MR. STEWART: Your Honor, Chris Stewart on behalf of
17
    NEO will respond. And if I can share my screen, I can display
18
19
    my slides here.
         (Slideshow displayed and shown throughout presentation.)
20
              MR. STEWART: Can you see that, Your Honor?
2.1
              THE COURT: Yes.
22
              MR. STEWART: Okay. So the dispute as Mr. Herriges
23
    described it is slightly different than how I understood it to
24
         They, obviously, are proposing that this is indefinite.
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We propose the term requires no construction. It has a plain and ordinary meaning and that it's not indefinite.

There's now been this allegation that our plain and ordinary meaning proposal is deficient in some way, but I don't think that's really borne out in the briefing so I want to address that first.

We think there is a plain and ordinary meaning to this term and we've described that in our briefing and the reason why we only provided this more specific numerical definition as an alternative is because we don't think you should adopt that. We think that is only to the extent the Court feels that you must provide a numerical boundary should you look to the testimony of Mr. Alberth and apply and adopt our alternative construction.

We think that the actual understanding of the person of skill in the art as borne out by the record in this case and the prior art and the intrinsic evidence is that it has a plain and ordinary meaning. Someone of skill in the art would know how to discern what a low PAPR is in the context of the patent with reasonable certainty because they know, as Dr. Axl has admitted, and as Mr. Herriges conceded at the end of his presentation, that the way you tell something is low in the PAPR context is by comparing it to a baseline.

So that is the reason why we didn't propose any specific interpretation of what the plain and ordinary meaning

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is because it's sort of implicit in the knowledge of one who has skill in the art. So the first slide I want to share with you --THE COURT: Let me ask you: When you say that a person of ordinary skill in the art compared to the baseline, what is the baseline? MR. STEWART: The baseline is the baseline PAPR in the given system being implemented. And so I think you heard in some of the commentary from Mr. Herriges coming from Dr. Axl's declaration, defendant's expert, he never disputes Mr. Alberth's testimony that the baseline PAPR of a given system is a known knowable thing. He even says that there could be baselines in certain systems that are high as 24dB. So that may be different than the exemplary general baseline that was identified by Mr. Alberth as an alternative argument, but it stands for the proposition, the undisputed proposition that a person of skill in the art can identify and know the baseline PAPR of the system. And so by virtue of that fact, by virtue of the fact that the conceded knowledge of the POSA is sufficient to know that baseline, you then also know that the POSA will be able to tell what is lower than that baseline and, hence, arrive at the low PAPR.

THE COURT: You can tell what is lower. But because

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if the baseline is a certain number, then anything below that would be lower. But is that enough?

MR. STEWART: Your Honor, I think it is. I think particularly in the context of this claim language where it talks about -- or specification where it talks about the basis of a low PAPR being something that improves the power efficiency -- we have testimony from Mr. Alberth explaining that the reason you carry about power efficiency and the way that you address power efficiency in the amplifier is by making sure that you don't have to redesign your amplifier to accommodate a special signal.

And he has numerous other opinions of his expert testimony that goes unrebutted that a person of skill in the art would know that just going below that baseline, ensuring you don't have to specially design your transmitter or your amplifier to accommodate this one signal is what a person of skill in the art would understand to be a low PAPR in this context.

Especially given how well-known this problem was in OFDM systems, how well broad it was in the art. And that was what I was going to show you on this next slide.

This is from Dr. Cimini's declaration, which was defendant's expert in Volkswagen's IPR, this is cited in our reply brief. These are descriptions of the prior art in that IPR declaration where the prior artists are using the term low

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PAR or low PAPR without any modifiers, without any thresholds or clarifiers because it's just an understood term.

And if you look at the instance on the right from

the -- describing the Chayat reference, when he's describing a

sequence that can reduce the PAPR, he defines it as

"significantly less than the values typical for data."

So he's using the same metric, the same threshold that we're talking about Mr. Alberth uses to say, okay, this is low because it is, in fact, significantly less than the values typical for data. So it's understood in the art that the way you determine if a PAPR is low in this context, is by making sure it is lower than the threshold for data or the baseline of the system.

THE COURT: So your position is anything lower than the average is low?

MR. STEWART: Yes, Your Honor. I think if you wanted to adopt a sort of more express construction that captures the plain meaning, I think that's right. If it's lower than the baseline PAPR, which then accomplishes all the benefits

Mr. Alberth talks about of not having to redesign the system to accommodate that particular signal, not increasing the power inefficiency of the amplifier, then you have achieved a low PAPR.

And that's consistent with the intrinsic record of the patent where it specifically calls out that improving the power

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efficiency of the amplifier is the purpose of having a low PAPR signal and that's further borne out by Mr. Alberth's testimony.

One other thing I wanted to address, Your Honor, about the three points Mr. Herriges made. The idea of the extrinsic evidence being irrelevant, I think he focused on those articles that Mr. Alberth cited. Which, as I mentioned, those were examples of how a particular person of skill in the art can identify a baseline and can achieve reductions below that baseline. They were not intended to be expressly limiting except in the alternative instance where you feel that's necessary.

But as a general matter, this idea that extrinsic evidence is irrelevant is, I think, just not borne out at all by the cases and, in particular, I had not seen -- sorry. My slides are moving on without me so I'm just going to pause them here.

I have not seen the case that he's cited in the slides, the Seachange case. I looked it up briefly before the hearing. It's a case about just claim construction in general. How you don't import limitations if they're not supported by the extrinsic record. In general, we agree with that concept, as we'll talk about a lot more later.

But in just a quick search, there's a case out of Delaware, 14 F.Supp.3d. -- I didn't get the entire site. I apologize.

But there are cases that talk about how extrinsic evidence is essential to an indefiniteness inquiry because you have to evaluate what a person of skill in the art would know since you're evaluating what provides a reasonable certainty to that person of skill in the art.

So to one of the questions you asked Mr. Herriges about the fact question, I think the knowledge of a person of skill in the art, the understanding of a person of skill in the art is a fact question that defendants have to establish by clear and convincing evidence and that is why the testimony of Mr. Alberth, particularly the portions of it that were unrebutted, that a person of skill in the art would understand the low PAPR to be one below that baseline. It has to be significant weight and their contrary -- or I guess lack of contrary rebuttal testimony means they can't meet that clear and convincing evidence burden to dispute that factual understanding of a person of skill in the art.

THE COURT: So how is somebody reading the patent supposed to know that that's what low means in this instance and not something lower than just slightly below the baseline?

MR. STEWART: Your Honor, I think that goes back to Mr. Alberth's testimony that this is a commonly understood term in the art. And that's why I cited those instances from the declaration of Volkswagen's expert where people in the art use this term regularly. They already understand what that you're

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seeing to achieve in lowering PAPR, especially within an OFDMA system is reducing it below that Baseline.

The references to power efficiency in the patent view

the person reading it to, okay, this is -- they're trying to achieve a low PAPR for the same reasons that are common to a person of skill in the art in these types of systems and the way they do that is by reducing it below that threshold to not have to redesign the power amplifier.

So you start with the patent and it's teaching -- I'm sorry, Your Honor. It looks like you might be speaking.

THE COURT: (Zoom audio muted.)

MR. STEWART: But you're on mute.

Your Honor, I apologize. I can't hear you. You're on mute.

THE COURT: Thank you. I want to understand the difference between your argument about whether this would be a term that someone with the ordinary skill in the art would understand versus its plain and ordinary meaning. So are you saying the plain and ordinary meaning with low is that its below the baseline or are you saying that only a person of ordinary skill in the art would be able to know that in this specific context that's what low means?

MR. STEWART: I think, Your Honor, I would say the plain and ordinary meaning to a person of skill in the art is that low in this context means lower than the baseline.

THE COURT: Why is it that NEO abandoned this in the other patent cases that have been cited?

MR. STEWART: Your Honor, I can't actually tell you the exact reasons why. I can tell you that those abandonments are irrelevant and they're different applications for different patents where for any number of reason, strategic or otherwise, the patent team might have determined just not to fight that particular term or they might have abandoned the application that included that term for reasons completely unrelated to the PAPR term. I honestly at this point can't speculate as to the reasons why.

But I can tell you -- and it's cited in that slide that I have here on the screen, also from that Cimini declaration, is that when issuing the '366 patent, the patent we are talking about, the examiner cited the low peak-to-average power ratio in the time domain term as one of the reasons for allowance.

So at the time of the '366 patent's issuance that examiner understood the term and, in fact, even cited there is a reason for allowance. So the fact that other examiners doing a less searching inquiry without the benefit of expert testimony in a complete record that you have before you here, initially rejected that term just has no bearing on the inquiry in this particular case for this claim in view of this full record that we have.

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But it definitely was not an acquiescence. I can at least tell you that much. THE COURT: Go ahead. MR. STEWART: My colleague just pointed out to me there's a case from the federal circuit called Salazar where it holds that "silence in prosecution is not automatically acquiescence." So to the extent the Court wants authority for understanding that concept, it would be the Salazar case in the federal circuit. THE COURT: I mean, I'll take a closer look at this. But I think they were saying it was more than silence but actually removed the terms and agreed with the claim of choice. MR. STEWART: In one instance I think that's right, Your Honor. But still, removal of the term just to sort of move through the prosecution and determine that you didn't need that for allowability or for novelty is not the same as acquiescing to it being indefinite. Right? It is still silent as to the merits of the indefinite inquiry and that is why it is not acquiescence in the conclusion. It was a decision simply to just not have that fight for that particular patent. So that's why we don't think that has any bearing on the actual definiteness of the term in this patent. Finally, Your Honor -- yeah, I think that covers about

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everything that I wanted to say Though I went a little out of order.

The final thing I'll say is that this expert testimony that we're talking about, this idea that you can evaluate the low -- whether a PAPR is low relative to a baseline is not just from our expert, Mr. Alberth. It's also from defendant's own technical expert Dr. Axl, as you can see on the screen where he explicitly said that a person of person of skill in the art in the field determines whether something is low by comparing the PAPR from one signal to another signal.

So, again, even Dr. Axl is not saying you need some additional information, some additional threshold of how much lower than the baseline is low. He said that you determine if it's low by comparing it to another signal or to a PAPR baseline. So he is in a sense acquiescing to the same construction that we're proposing here.

And the other citation here is to Dr. Cimini, the technical expert in the IPR who uses the term low PAPR without any additional caveats or clarifications or metrics. Because it is an understood term in the art.

So unless Your Honor has other questions, that's all I have.

THE COURT: No. Thank you very much. I appreciate your argument as well.

And so I'm not sure if you all have budgeted rebuttal

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time or not. I'm assuming not because we have so much to go
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    through.
              MR. HERRIGES: Your Honor, if I can take one minute
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    with Your Honor's permission. I think that I can wrap up any
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    rebuttal I have.
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              THE COURT: I'll give you three minutes.
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              MR. HERRIGES: The first point I want to make, Your
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    Honor, this idea that lower is the same as low is absolutely
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    wrong. I mean, if they meant low, lower, they would have said
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    lower. They specifically chose the word low and they can't now
    walk that back.
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             And if it were the case that just being lower was
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    enough, they would have said. Their alternative construction
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    is three below 12. Not 11 below 12. Not 11.9 below 12.
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    low. It's low. It's not just lower.
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              THE COURT: I mean, just to -- this starts to sound a
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    little bit nitpicky, but isn't relatively low the same as
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    lower?
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              MR. HERRIGES: Relatively low as they use it,
    perhaps, Your Honor, but it does not -- it still doesn't answer
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    the question because relative to what and how low is relatively
    to low. And I think maybe more importantly, relatively low is
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    not the same thing as lower, which appears to be what they're
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    arguing.
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              The second point is even if you accept all their
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evidence as true -- and I'll focus on the Cimini declaration.
             What Cimini said is that 3dBs -- and this is in
    paragraph 54 of his declaration.
             He says 3dBs could be low. So now we've got one
    expert saying 3dBs. We've got another saying 9dBs and I have
    Mr. Stewart saying it just has to be lower. What all of this
    says is there is no reasonably certain standard in the art.
             And the idea that a skilled artisan would just know is
    not enough for reasonable certainty here. There needs to be
    objective boundaries and because there aren't, the claim is
    indefinite and we would urge Your Honor to find that.
             THE COURT: (Zoom audio muted.)
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             MR. HERRIGES: I apologize, Your Honor. You're on
    mute.
             THE COURT: Thank you very much, Mr. Herriges. I
    appreciate your argument as well.
             So let's move on, then, to the third set of terms here
    that we have which is also from the '366 patent and I'm going
    to quote that from claims one and 17. And the terms are,
    quote, a ranging sequence selected from the set of ranging
    sequences.
             And so according to what you had indicated to me
    previously, we would then turn to Mr. Stewart to address this.
    How much time would you like, Mr. Stewart?
             MR. STEWART: Your Honor, simply because I'll make a
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few introductory remarks as part of this term, I think 10 1 2 minutes. THE COURT: Go ahead. 3 MR. STEWART: I'll share my screen again. 4 (Slideshow displayed and shown throughout presentation.) 5 MR. STEWART: The term we're talking about now is 6 selected from a set of ranging sequences. As you know, we 7 propose that it doesn't require any plain and ordinary meeting. 8 I think your preliminary construction is consistent with that. 10 The defendants want to essentially limit the term "selected from" to "selected by a particular entity", namely the mobile 11 station, from a set of ranging sequences. 12 So before diving in to the specific arguments, I 13 thought if we just talked about indefiniteness, I would 14 reorient a little bit more on the traditional claim 15 construction concepts that are going to come up in this term 16 and several others here on out. 17 A particularly important thing I think in this slide 18 19 on the screen, this sort of decision tree for claims construction, is that the first step is always to determine is 20 2.1 there a plain and ordinary meaning to the term in view of the specification. That doesn't mean looking at whether there has 22 been disclaimer or disavow or lexicography or some sort of 23 narrowing of the well-understood meaning. It's simply to 24 evaluate is there already a known meaning. And sometimes in 25

certain cases you have to look at the patent specification just to even be able to ascertain the claim meaning because the words don't have a commonly understood meaning or, as quoted here on the screen in *Embrex*, the construction of claims can sometimes just be a way of elaborating the normally tersed claim language. Not to change the scope of the claims, but just to make them more clear.

There are going to be a couple of terms we talk about today that fall into that category where we're just elaborating on the existing scope of the plain and ordinary meaning.

What you're more often going to see, though, is under the guise of just interpreting the term in light of the specification in the standard *Phillips Embrex* type way, defendants are going to look at the specification and specific embodiments in the specification and try to narrow the plain and ordinary meaning to exclude something. That can only be done in two context -- and this is clear in federal circuit law -- either in lexicography, which is quoted from *Phillips* on the left -- where there's a clear definition and I don't think we have any arguments in this case that that's happened.

Or on the right in the case of clear and unmistakable disclaimer. A clear disavowal that the patentee is entitled to less than the full scope of the plain language.

So in all of these terms where we're looking at particular descriptions in the specification or embodiments in

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the specification to try to create a limitation and reduce the scope of the claims, it cannot simply be for context. You can't simply look at the specification and say, "Well, I know this has a plain meaning, but I need to look at it in the context of the spec."

That is only possible if there's not a plain meaning on the face of the term. If you're trying to narrow the scope of the term from its plain meaning, you're doing a disclaimer and *Thorner* has said that that's an exacting standard. It's not probably too far off from the clear and convincing evidence standard we talked about in the indefinite.

So that's just one thing I wanted to focus on briefly as it comes up in a lot of these terms. This is a recent case from 2019, Continental Circuits cited in our briefing. Our firm is actually a part this case. Where even in the face of a single embodiment being disclosed throughout the entire specification, even in the face of references to the invention in discussing that embodiment, and I think they even distinguished prior art by discussing the specific embodiment.

In the prosecution history, the federal circuit still reversed the district court who imported that embodiment into the claims when it was inconsistent with the plain meaning of the claims which didn't have that limitation on the face.

So in recent cases especially, the most recent federal circuit case on this matter, they've been very consistent that

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the only time they look at the specification and embodiments in the specification is like in these cases cited by defendants where this is no plain and ordinary meaning or it doesn't carry an accepted meaning for one of skill in the art.

So I apologize for waxing poetic there a little bit.

But the main point is in all of these materials we have to understand whether we're actually interpreting a term that doesn't have a clear or plain meaning in which case you maybe can look at the specs if you have to to find guidance. But where you have a plain meaning that's well understood, you cannot import a limitation from the specification, and it would be legal error to do so unless it's clear and unmistakable. They have to be words of exclusion and restriction not just consistent embodiment descriptions that are consistent with that limitation.

So with that preamble, the issue in this particular claim with respect to "selected by" is relatively straightforward. The words "selected by" they're just like "chosen from" or "coming from" a set of sequences. They have a plain and ordinary meaning that is unmistakable in the fact that it does not specify an entity doing the selecting. And you can see that in just the structure of the claim itself where — this is claim 17 from the patent method claim. It's a method of transmission by a mobile station and then there are explicit method steps that must be performed by the mobil

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station such as transmitting the data signal, transmitting a ranging signal, but then there's this wherein clause where you're no longer describing the actual method steps performed by the mobile station, you're describing characteristics of the different components of the method. And that is where you see in that first wherein clause that the ranging signal is formed from a ranging sequence selected from a set of ranging sequences.

It's agnostic to whether it is selected by the mobile station or by the base station and I think contrary to what you'll see in the defendant's presentation, there is nothing about random access that mandates that the mobile station has to necessarily select that sequence in order to use it to form the signal that the mobil station sends.

As Mr. Alberth says in his declaration, it's commonly understood that the base station can send a particular sequence and say, "Hey, if you want to connect to me, you need to use this sequence." And then the mobile station can still do every step in this claim that it's required to which is use that provided sequence to form the signal, transmit the signal and otherwise -- the claim.

So as your preliminary construction knowledge is I think this is entitled to plain and ordinary meaning. It should not be limited to just performance by the mobile station because that is a reduction in the scope of the ordinary

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meaning of this term and would require unequivocal disclaimer,
which is not present. Even if the only embodiment explicitly
discussed in the spec shows the mobile station during this.
         And that's all I have, Your Honor.
         THE COURT: All right. Thank you very much.
         And who would like to address this on behalf of the
defendants?
         MR. DESAI: Thank you, Your Honor. This is Ankur
Desai at DLA Piper for the Toyota defendants. I would like to
address this term.
         THE COURT: You may proceed.
     (Slideshow displayed and shown throughout presentation.)
         MR. DESAI: Sharing my screen here. Hopefully it's
coming up.
         Your Honor, the issue presented here -- and you see
the term again that we've just been talking about a "a ranging
sequence selected from a set of ranging sequences."
         The key dispute between the parties here is
really -- you know, and the parties agree to use this phrase to
represent the dispute here. But the reality is there's not
disagreement about the meaning of this particular phrase. I
think the parties agree on what selects mean and they agree on
what a ranging sequence means.
         The focus of the dispute is how this phrase operates
in the context of the claim language and that's what I would
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like to focus on.

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In particular, NEO takes the position that it's advancing plain and ordinary meaning. But the reality is it's brief is quite clear that its interpretation goes far beyond that. NEO's interpretation is, frankly, unlimited and abstract and I'd like to focus on that. I think this parting here is the same one that Your Honor has likely seen. We've illustrated in both to the asserted claims on this slide. And, you know, the '366 patent claim's a mobile station. You see that in the preamble of claim one. It ends with the "mobile station comprising." That was not highlighted on NEO's slide. But that's critical.

The '366 patent does not claim some other entity. It does not claim the base station. And the structure of the claims accords and you see that in both of the asserted independent claims.

In both preambles, we see that the communication is going from the mobile station to the base station.

In the next clause of both claims we see the data signal that is being sent to the serving base station.

Subsequently, the ranging sequence being transmitted to the serving base station.

And it's in that context, Your Honor, that the nested clause that we're looking at here is found. And, you know, that context makes a hundred percent clear that even though

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this verb "selected" is a passive voice verb, the context makes clear that that selection has to happen by the mobile station. The reason is that it's the same ranging signal that is being sent by the mobile station to the base station.

Now, by contrast NEO, as I say, is sort of in the guise of plain and ordinary meaning advancing a abstract and unlimited interpretation. We've put a few selections from their brief that really make this clear. You know, all of NEO's arguments and, frankly, their entire brief is directed to selection by the base station. But that's merely convenient for NEO's infringement positions. There's nothing in the patent that could select -- you know, that could limit this selection to the base station and NEO admits that.

I think NEO's position, as you see here on the screen, is it doesn't matter who or what selects the ranging sequence. They say that other entities could do so and they provide no definition for that and the reality here, Your Honor, is there are a finite number of ranging sequences and merely adopting the plain and ordinary meaning without countering those arguments by NEO or addressing them raises validity questions that were not briefed by the parties. You know, NEO's expert refers to an example specification that I'll address further, but in that example it's a selection between one and twelve. And merely choosing a random number between one and twelve is an abstract idea. It is not patentable.

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And, you know, reducing the claim language to that degree of that abstraction is a serious problem as far as the validity of this claim. That interpretation, Your Honor, also flies in the face of what the patent teaches. And here we've provided a -- really the only part of the specification that addresses this issue. It's abundantly clear. It says the mobile station chooses the ranging sequence. It subsequently uses that sequence to identify itself.

And, you know, defendants presented in our brief case law to the effect that this sole embodiment is highly indicative of the scope of the claims, that it is what a person of ordinary skill would use to ascertain the scope of that claim.

I'd like to address, Your Honor, the points that NEO has made and NEO's counsel made in relation to the relevant law here. As a starting point, they make the point that, you know, only if there's no plain and ordinary meaning can these, you know, references to the specification become relevant and, Your Honor, that's exactly the case. Merely saying that they're advancing the plain and ordinary meaning is not enough. They have not said what the plain and ordinary meaning is and the only interpretation they've offered is, frankly, utterly indefinite, as we showed on the previous slides. Their brief makes clear that they think that's selection by anyone or anything.

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You know, I'd also like to address the *Thorner* case. That's one that NEO cited on the reply and we provided the full quotation from *Thorner* here. I would like to be clear that from an analytical perspective, defendants do not believe this is a Lexicographer exception issue and the reality is, you know, as the *Thorner* case makes clear, it's the context of the specification that matters here and that's the context that we have provided. You know, and again, as NEO's counsel said, this is not an issue of disclaimer either.

Your Honor, this slide just shows visually what we've been talking about here. This shows the relevant language in isolation. You know, seeing this in the context of the broader claim makes clear that the flow of communication has to be, you know, from the mobile station to the base station. We showed that previously and we've just called out that the ranging signal here is exactly the one that's referred to above that's being transmitted by the mobile to the base station.

The ranging sequence forms that ranging signal.

THE COURT: Is there another way that the ranging signal could be selected?

MR. DESAI: Your Honor, that's exactly what I would like to get to next, and I think the reality is doing that would pose a very significant technological problem. That's an issue that was addressed --

THE COURT: Regardless of whether it poses a

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technological problem, if there's another way that the ranging sequence could be selected, and this language does not specifically say that this ranging signal -- I was saying if this ranging signal can be selected by some way other than by the mobile station, then why should the claim be limited as you're suggesting that it should when the language itself doesn't do that? MR. DESAI: Your Honor, the answer is it cannot be selected in a way that identifies the mobile station which is what the claim language requires the sequence to do. And you see that called out here on the screen. Let me explain a little bit further. I think defendant's expert really highlights this in our -- in his declaration that was attached as an exhibit to the brief. NEO's expert has -- first of all, NEO's expert has no support for their position in the intrinsic record and as a result looks to an unrelated specification, something that is not at issue in this case. What they point to is a preamble signature. preamble signature is selected by another entity, but it does not identify the mobile station and indeed it cannot. And just going back, that's exactly what this sequence needs to do in the context of the claim language.

Now, by contrast, that same technical specification

does include a signature that does identify the mobile station

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and that is selected by the mobile station. Indeed it has to, Your Honor. That selection by the mobile station is necessary in order for that signature to be able to identify the mobile station.

I would just reiterate, Your Honor, that there is a broader issue. And, again, this is seen in NEO's expert declaration and we've highlighted the language here at least.

All of the arguments both in NEO's brief and by their expert are directed to this possibility that a base station could do this selection, but that's not NEO's position. And as we've made clear and as is shown here on the slide, their position is that any other entity could make that selection. The reality is that the patent provides no description whatsoever of how another entity could make that selection in a manner that identifies the mobile station.

This presents, as I say, a technological problem, but also, as alluded to before, a validity problem as far as sort of the broad and abstract scope of that type of selection.

The reason -- and I'll briefly sort of elude to the technology tutorial that we provided Your Honor previously, both the high level and the patent specific technology tutorials. The '366 patent talks about random access, Your Honor, and as we gave the example previously that random access occurs, for example, when a user turns on a mobile phone after their plane has just landed, that is the process by which

connection is established for the first time.

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And so the reason that NEO's proposal is really a problem from a technological perspective, is there is no previous communication that can be relied on here. If some other entity is making the selection, there's no way for that other entity to provide that information to the mobile station, which, again, the claims make clear, the mobile station is the entity that must then ultimately send the ranging signal.

So without that missing link, there is no written description for that proposal. As we showed previously, the written description that does exists stands squarely for the -- it is one sentence and it says "the mobile station chooses the ranging sequence."

And just to make it clear, the '366 patent, you know, accords with this. The '366 patent is describing this random access process and it agrees -- you know, the language of the patent is clear that it is talking about establishing that communication in the first instance.

THE COURT: And are there some instances in which, let's say the cell tower could send out the ranging sequence of some kind that the mobile device would receive?

MR. DESAI: Your Honor, it's possible and it would be an invention that is not claimed by the '366 patent. It is nowhere --

THE COURT: I know they're not claiming that. I don't

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suggest that they're claiming that. I'm just suggesting that they may want to have what they are claiming be able to form a ranging signal from a ranging sequence that's selected by something other than their own mobile station.

MR. DESAI: Your Honor, I think there are a number of ways to articulate the problems with that solution, but we think the written description is the clearest one. There is no written description whatsoever of what that process would be. If another entity is to make that selection, that selection needs to then be consistent with what the claims do require, which is that the mobile station subsequently sends the ranging signal. So I think Your Honor is correct that that selection is a possibility. What's missing and what NEO's brief does not explain and does not even attempt to explain is how that entity subsequently conveys that ranging sequence to the mobile station. And that's the written description problem that would be posed if Your Honor were to accept the, you know, broad interpretation that NEO is advancing here in the guise of plain and ordinary meaning.

THE COURT: All right. Well, this written description may be a different issue, but perhaps Mr. Stewart will address that.

Is there anything further you wish to add, Mr. Desai?

MR. DESAI: Your Honor, I would just conclude, as you say, the written description problem is an issue which the

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parties have not briefed is the validity issue that I think is posed if NEO's interpretation is accepted without further clarification. The mere selection of a random -- a number between one and ten is simply an abstract idea, and NEO's brief makes clear that that's what they propose. Furthermore, that that selection can be made by anyone or anything. That is not a patentable subject matter. Thank you, Your Honor. THE COURT: Thank you, sir. All right. Would you like a few minutes, Mr. Stewart? I'll give you three minutes. MR. STEWART: Thank you, Your Honor. First the claim language that is selected from -- if you say in a patent that a, you know, a hammer head is made of metal, it's not indefinite. It doesn't have a 101 problem, it doesn't lack written description because a person skilled in the art of hammers understands what it means for them to be made of metal without understanding who the manufacturer was of the particular metal head that is on the hammer. I think it has a plain meaning to just say select from, regardless of specifying the particular entity during the selection. We have identified THE COURT: Now, how do you address the sort of syntactical arguments that have been made that when you read this, it looks as if you are talking about a mobile station

selecting the ranging sequence?

MR. STEWART: Your Honor, I think that goes back to the point I made on my opening remarks. When you look at the claim structure, it's actually the opposite. The syntactical structure of the claim has specific language when it's identifying what the mobile station is doing. The method comprising the mobile station transmitting or a particular signal or transmitting a ranging signal. When it talks about the selection, it doesn't do so.

It knows how -- in the same claim it knows how to structure a syntactical phrase that would have said "the method comprising the mobile station selecting a sequence from a range of sequences." And instead of using that language it opted for the more passive, using a signal or -- or sequence that is selected from a set of sequences.

Mr. Alberth has explained that there are multiple ways to do it. They quibble with the particular evidence he cited, but they don't dispute his overall point, which was that a person that's skilled in the art would have known that the base station should do the selecting.

And the other arguments you heard from Mr. Desai were really infringement arguments. He's saying it might be hard to show infringement of the claim if it's the base station doing the selection instead of the mobile station. That's not a claim construction issue and it's the same thing with his

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written description argument, which is sort of another semantic
thing in a lot of their arguments in this case. That's a
defense that they have to meet by clear and convincing evidence
and present to a jury based on the terms that are properly
construed with the plain and ordinary meaning. We are ready to
meet that challenge. We think all the instructions that we
proposed are adequately described. But the fact that there
might hypothetically be a written description argument they
raise somewhere down the road based on the claim construction
is not a reason to depart from the plain meaning of the term.
         THE COURT: All right. Thank you very much, sir.
         So our next term that we have here is from the '908
patent and it has the following terms that I'll, quote:
"Wherein the portion of the frequency band used for
transmission of the random access signal does not include
control channels."
         And so the parties take different positions with
respect to this language. And so would that be Mr. Stewart
again addressing this?
         MR. STEWART: Yes, Your Honor. That's me again.
         THE COURT: How much time?
                       I'll hand off the mic eventually.
         MR. STEWART:
         THE COURT: How much time do you need?
         MR. STEWART:
                       This one I think, five minutes.
         THE COURT: Go ahead.
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(Slideshow displayed and shown throughout presentation.)

MR. STEWART: So one more time sharing my screen.

Your Honor, you identified the dispute accurately. The question is really whether when the patentee said "control channel" did it actually mean "control information?" Because when you really look at the defendant's proposal, they define a control channel as a channel care and control information, but that really just collapses in on itself. And what they're saying is that if the random access signal overlaps with control information at all, it would not infringe this claim.

So by narrowing the scope -- sorry. Broadening the scope of this negative limitation, they're essentially narrowing the scope of the claim as a whole.

The obvious reason -- the straightforward reason why I think the Court's construction is right to not import this idea of control information into the claim language is that control channel is a commonly understood term in the arts. Mr. Robert said so. Their own high-level technology tutorial said so. They explained that when the base station communicates with the UE, it groups defensive information into channels based on the type of information.

So in their briefing, they bemoan this idea of a primary purpose test that we're allegedly placing. But we're importing no such test. We're just using what they admit is the common understanding of a person skilled in the art, mainly

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that wireless communication systems contain channels that are grouped based on the type of information.

There is often -- "frequently used channels include a physical downlink control channels."

There are also uplink control channels, et cetera. The point being that a person skilled in the art would know that a control channel is an actual thing. An actual channel designated for control information in a wireless communication system and would not just encompass any sequence that has control information.

The upshot, right. The reason they want this is displayed on this slide. The red is intended to designate a hypothetical control channel, an actual control channel where the red is fully control information. The green is a hypothetical random access signal. The claim requires that the green random access signal not overlap with the frequency band used for control channels in the red. If instead the term is broadened to just any control information, then as you can see on this slide, if there's one red dot in the portion of the frequency where the green is, that contains one single piece of arguable control information, then the defendants are avoiding infringement.

So that's why they want this, it's an extensive narrowing of the claim language and we think you should just adopt the plain and ordinary meaning.

The only comment I make about the proposed preliminary construction by the Court is that while we do agree that this is a control channel, it's not just control information and your proposed construction isn't really something we would dispute on its face. We agree that this would be a multi-carrier control channel. We do just generally oppose the importation of any limitations from the speculative purported embodiments into the claim language. So we would oppose the inclusion of the MC, multi carrier control channel not because it's a really a substantive issue that matters for this term, but because, you know, matters more for other terms and it's part and parcel with this idea that even if the specification specifically talks about a multi-carrier control channel in the embodiments, there is no clear construction (phonetic) to this claim.

And that concludes my argument, Your Honor.

THE COURT: Can you clarify exactly -- are you saying that you agree with the proposed construction of the Court or you would amend it in some way?

MR. STEWART: Your Honor, we would prefer it would just be plain and ordinary meaning. That the control channel already had its own meaning and it's well known to a person that's skilled in the art and no modifiers need to be at all. So we would oppose the addition of multi-MC, multi-carrier in front of the words, "control channel," but as a substantive

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matter in this particular term, I'm sort of alerting you to the fact that that's as significant as it might be in other issues. (Court reporter imposes clarification.) THE COURT: Thank you very much, Ms. May. And so who would like to respond to this argument regarding the issue of control channels? MR. DESAI: Your Honor, Ankur Desai for the Toyota defendants. I'll respond here as well. THE COURT: Okay. (Slideshow displayed and shown throughout presentation.) MR. DESAI: Once again, just sharing my screen. I'11 skip ahead to the slide for the term at issue here. I think, Your Honor, in light of the Court's preliminary construction, I'd like to make my comments brief and primarily respond to what I heard NEO's counsel say here. I think the crux of this issue and the key dispute as you see on the slide is simply whether the ordinary meaning of control channels is, as defendants have proposed, channels carrying control information. Our brief, Your Honor, we provided authority. This issue has been litigated in precisely the same technology space and the construction found there is exactly what defendants have proposed, the finding by the board, by the Patent Trial and Appeal Board that a control channel is a channel that carries control information.

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Your Honor, I apologize. I need to move forward slides here. I'll just say briefly, NEO's counsel cited the *Embrex* case. We think that's an appropriate case to cite here and what that case said is it referred to terse claim language and that a construction is appropriate where, you know, that construction merely articulates that plain and ordinary meaning and that's exactly what defendants propose to do here.

And, frankly, we don't disagree with the preliminary construction. I think what you see in the briefing and what you heard NEO's expert talk about was a primary purpose. That is not embraced in the preliminary construction and to the extent that that is not a part of the Court's interpretation of this term, we agree with that preliminary construction.

I think we explained in our briefing and I may have misheard NEO's counsel, but I believe they characterized defendants' position as agreeing with this. I just would like to clarify. That's not the case.

NEO's expert provides no basis for this primary purpose naming convention.

NEO's expert also does not refer to any extrinsic evidence that would support that convention. What NEO's expert does refer to is a unrelated specification, and defendants showed in our briefing that specification squarely disproves that supposed naming convention. According to Mr. Alberth, a shared channel is used primarily to send data, and a controlled

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channel is used to send primarily control information. But the specification that they have cited in their brief is pretty clear it contains a data channel. According to Mr. Alberth, that ought to be named a shared channel. It also contains a shared control channel. That supposed naming convention really falls apart in light of that. So, again, to the extent that that primary purpose test is one that the Court has not embraced in its preliminary instruction, we felt it is an appropriate construction. THE COURT: All right. Thank you very much, Mr. Desai. And I don't know if you feel it's appropriate to respond at all, Mr. Stewart, but I'll give you a minute or so. Go ahead. Your Honor, the only thing I would say MR. STEWART: is we're not -- we weren't imposing a primary purpose test, again, and I don't think the Court's construction bears on that at all. It's simply acknowledging, in our opinion, that a person of skill in the art knows what a control panel is. The labels apply to channels and while the communication system throughout the prior art, called themselves control channels and that's what we're talking about in the patent. That's all I have to add. THE COURT: All right. We've been going for about an hour and a half. I think it might be appropriate to take a brief recess here. So it's about 11:27. Let's try and be back

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in five minutes or so.
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              THE LAW CLERK OF THE COURT: The Court stands in
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    recess for five minutes.
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          (At 11:28 a.m., off the record.)
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          (At 11:35 a.m., back on the record.)
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              THE COURT: All right. Let's get started here. And
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    so Mr. Weissburg, you can call the Court in session.
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              THE LAW CLERK OF THE COURT: Please rise. The United
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    States District Court for the Eastern District of Michigan is
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    back in session. The Honorable Terrence G. Berg presiding.
              THE COURT: Good morning again, everyone. So we took
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    our break about five minutes ago and we're back on the record
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    here in our claim construction hearing. We just finished the
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    fourth term that was contested here. And now we're going to
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    address the fifth term. This is a term that is also from the
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    '908 patent in Claims One and Two as well as Nine and it's just
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    the term "associated with." So associated with, end quote.
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              So I'm not sure which counsel would like to address
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    that.
              If you would like to move forward, Mr. Stewart.
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              MR. CASSADY: Your Honor, can I -- this is
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    Mr. Cassady. If I can just have a housekeeping thing real fast
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    with Your Honor, if I could?
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              THE COURT: Go ahead.
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             MR. CASSADY: Your Honor, as was mentioned earlier in
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the hearing, I've got another hearing tomorrow I need to travel
     I just wanted to ask your permission to leave the hearing
when I need to leave. I didn't want to do it without your
permission, Your Honor.
         THE COURT: No, that would be fine. I understand that
there are a lot of counsel here in the hearing. So you are
certainly excused.
         MR. CASSADY: Thank you, Your Honor. Thank you.
         MR. STEWART: Thank you, Your Honor. And this is
Chris Stewart again. I will be addressing the next term. If I
can briefly -- I understand it will count against my time.
I could jump back to the first term, the low PAPR term, for one
brief moment. There was discussion about silence and acquiesce
in the other applications where the term was objected on the
grounds of indefiniteness.
         During the break we looked at the record really
quickly and I just wanted to put on the record that canceling
those claim and amending the claims to remove the low PAPR
dispute, NEO expressly said in its remarks in the prosecution
that the applicant disagrees with the examiner, but is making
these amendments in order to advance prosecution. I just
wanted to make sure the record is clear we did explicitly
disagree with those and not acquiesce to those.
         THE COURT: Thank you very much.
         MR. STEWART: All right. May I proceed on the
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"associated with"?

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THE COURT: Go ahead.

MR. STEWART: Thank you, Your Honor. Associated with, the dispute here, as you can see on the screen, is whether we clearly and unmistakably narrowed the plain words "associated with" to mean identifying. We agree with Your Honor's preliminary construction that to the extent there was any disclaimer whatsoever, it is simply a disclaimer of the fact that "associated with" cannot merely mean "assigned by".

The MAC ID that was identified in Walton in the PTAB assigned by the base station, but it was associated with a different entity, the UE, the immobile station not the base station.

So if there is going to be any disclaimer, it should definitely be limited to just that. That associated with means more than merely assigned by. It does not, however, need to be further limited to this idea of identifying. And the reason is that, first of all, it's just identifying as narrower and inconsistent with the plain meaning of associated with.

Even defendants I think in their brief implicitly acknowledge that associated with is broader, and they have to resort to disclaimer and accuse us of prosecution history disclaimer in order to narrow it to what they want to do, which is identifying.

The one reference to it in the specification that

defendants point out talks about a code or sequence that is designated to the corresponding base station. That also is less stringent or restrictive than this idea of identifying because the sequence can be designated to that base station. It might not be necessarily uniquely designated to only that base station in a way that would be uniquely identifying of that one against all others.

So even the usage in the specification allows for a broader understanding of this term than merely identifying.

And then when you look at the statements made in the IPR before the PTAB the defendants only show you in their briefing this one statement where we're talking about the term, "identifying." The user terminal or the MAC ID is used to identify the user terminal and not the base station. But if you look at the brief as a whole or the statements made as a whole, it is just peppered with this primary argument, which is, as you can see in the top left, that the MAC ID is at most associated with the user terminal, not the access point.

The MAC ID is associated with the user terminal, not the access point. When Walton refers to the user terminal assigned MAC ID, it's referring to a MAC ID associated with the mobile station, not the base station.

The point we're getting across over and over and over again, unmistakably was simply that the MAC ID in Walton was associated with the wrong element. As evidence of that

association, the fact that it was associated with the user terminal, we referenced what Walton itself talks about. I think it would be in one of the defendants' slides, they show the portion of the Walton reference, where Walton talks about the MAC ID being used to identify the user terminal to the base station.

So in rebutting, responding to that Walton reference, our expert and our IPR counsel talked about identifying as a way of explaining why it's associated with the wrong entity.

So, for example, they say it's associated with the base station. We say no, it's associated with the user terminal. See, *Walton* says that the MAC IDs is useful for identifying the user terminal, not the base station.

So when you're talking about clear and unequivocal disclaimer, simply using the language of the prior art to explain why that prior art doesn't meet the plain meaning of the claim limitation is not a clear and unequivocal disclaimer or that you're trying to narrow the definition of the words in your patent to match the language that just happens to be used by this one prior art reference.

In sum, the fact that we talked about identifying, if at all, was solely just evidence of the way that Walton explains the relationship between the MAC ID and the user terminal, which was inconsistent with the claims that require a relationship between the given sequence and the base station.

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Associated with was still the focus of the argument, it's still got a plain meaning all by itself. It doesn't need any further construction. THE COURT: Thank you very much, sir. Who would like to respond regarding this term? MR. HUGUENIN-LOVE: Good morning, Your Honor, I'm James Hugenin-Love representing GM and I'll respond on behalf of defendants on this term. THE COURT: Go ahead, sir. MR. HUGUENIN-LOVE: May it please the Court, I'll start with Slide 61. (Slideshow displayed and shown throughout presentation.) MR. HUGUENIN-LOVE: This is a slide showing what the key dispute is here and that's whether NEO should be held to its IPR statements that associated with requires identifying. We don't think that the preliminary construction goes far enough because we don't think that it captures the full effect of NEO's IPR statements. And I heard Mr. Stewart comment about there's a primary argument that they had. Yes, they made a primary argument, but then they went further and they said -- made more arguments in order to distinguish why this MAC ID was not associated with the base station. And in order to give full effect to this particular term, I think it's important to look at these other statements.

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So turning to Slide 62, we can just jump right in to the IPR. I think it's important to focus first on what Dell said in order to understand how narrow NEO interpreted the term "associated with," in order to overcome Walton.

On the Slide 62, we see the base station and, yes, it assigns this MAC ID. It's a private MAC ID to the user terminal. And so that this user terminal can use the MAC ID to identify itself with this base station and only this base station. And because it identifies itself to this base station and only this base station, not any other base stations, Dell made the argument this MAC ID is therefore associated with the base station.

Again, a sequence can be associated with multiple things. It's not limited to an either/or proposition like NEO wants it to be. Particularly Dell cited from, quoted Paragraph 122 among other paragraphs, where Walton says that this user terminal registers with the access point, the base station, at the start of a communication session and is assigned a unique MAC ID by the access point.

And that MAC ID is used to identify the user terminal during the session. So it's clear that this MAC ID, again, is what the user terminal used to identify itself with this particular base station. If it were trying to identify itself to another base station, that other base station wouldn't know who that user terminal is or anything because only one

particular base station assigned that MAC address -- or MAC ID.

So what did NEO say in response to Dell's arguments?

And I think this is the part of the NEO's IPR statements that weren't captured by the preliminary -- by the preliminary construction.

So what did NEO say? NEO said, well, Walton teaches that the purpose of its MAC ID is to identify the user terminal, not to identify the access point that made the assignment.

Therefore, they made the conclusion that the MAC ID is associated with the user terminal rather than the access point.

Now, NEO could have ended their argument in the IPR, they could have just said, you know, we don't think that the MAC ID is associated with the base station because it's assigned by the base station, but they didn't. They went further and they used this express word "identify." And this bright-line rule between what's associated and what's not associated with something.

Well, it's whether it identifies that something.

Mr. Alberth, the expert that NEO used in the IPR and the same expert that they're using in this district court litigation agreed with NEO, and he said, "Knowing the MAC ID does not allow for identification of the access point." He used the same word.

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And he said, "Therefore, the MAC ID is not associated with the base station," using the same identification language that NEO was arguing. And that was Slide 65.

So to NEO's credit, this argument the PTAB found persuasive. In particular, they found this identified language particularly persuasive, and Mr. Alberth's declaration testimony, that a MAC ID is used to identify a user terminal. So, therefore, Walton's MAC ID is associated with the user terminal, not Walton's access point.

So we have NEO's IPR statements, we have NEO's expert, and then we have the PTAB all agreeing and finding persuasive that the argument that the MAC ID is used to identify a user terminal, is what ultimately overcame the Walton reference.

Because the MAC ID is associated with the user terminal and not with Walton's access point or base station.

So we think it's important that identify be part of the construction required. Because that makes sure that NEO's held to consistent statements between what was said in the IPR and now what is said in this district court litigation.

Because they shouldn't be able to point to a sequence like Walton's MAC ID or any other sequence in this litigation that does not identify the base station as satisfying the claim.

Now, if I can just jump ahead to Slide 71, which provides a federal circuit case. This is *Technology Property* versus Huawei case. We think it's particularly instructive

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here. In that case the patentee made certain statements that a prior art reference called Madgar (phonetic). The patentee made these statements that Madgar's oscillator is at a fixed, not a variance frequency and relies on an external pistol postulate. And the federal circuit said, you know, maybe the patentee didn't need to make those arguments to overcome Madgar, but they did. And the district court was correct in construing the oscillator term to mean an oscillator whose frequency is not fixed by an external crystal, using the words the patentee used to overcome Madgar.

And particularly instructive I think for this case is that the Federal Circuit said that the scope of surrender is not limited to what is absolutely necessary to avoid a prior art reference; the patentees may surrender more than necessary. And when this happens, we hold patentees to the actual arguments made, not arguments that they could have made.

So NEO could have limited their argument to what Mr. Stewart said was their primary argument, but they didn't. They went further and they said how to distinguish between what is associated with something and what isn't associated. That's identifying.

If it identifies somebody, it's associated with. If it doesn't identify something, it's not associated with. And so we think that our construction, defendants' construction of identifying, captures the full effect that NEO was making in

the IPR. 1 THE COURT: Thank you very much, sir. 2 Is there any response to the arguments of 3 Mr. Huguenin-Love's argument? 4 Yes, Your Honor. This is Chris Stewart MR. STEWART: 5 again for NEO with a quick response. 6 7 That case that was just cited, the Tech Prop case from 2017, that was before the Continental Circuits case from 2019 8 that I cited in my earlier remarks about the exacting standard 10 for disclaimer and the Continental Circuits case explicitly talks about the fact that merely criticizing the prior art by 11 reference to a particular embodiment of your invention or 12 comparing and contrasting your invention with the prior art is 1.3 not sufficient to create a disclaimer unless you make it 14 absolutely clear that you're disavowing all other scope. 15 16 So that just goes back to what I said in my opening Slide 64 from the defendants said, "Walton teaches remark. 17 that the MAC ID identifies the UE and not the base station." 18 19 They were comparing and contrasting in the context of this specific embodiment of the sequence that was discussed in 20 2.1 Walton. That doesn't mean that they were giving up all other scope within the term of "associated with" other than 22 identifying. 23 24 The sequence associated with the base station could be useful for identification. It could be used in that process, 25

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but that doesn't mean that it necessarily needs to uniquely
identify the base station, which seems to be what defendants
are propounding here in order to meet that claim language and
there was no disclaimer.
         THE COURT: Very good. All right. Thank you very
much.
         So let's move on then, to the sixth term and that's
also from the same '908 patent, and in that case the term is
"both random access signal," and it's found in claims one and
two, number four and six and nine. So, I want to give each of
you time to address this as well.
         So Mr. Stewart, are you going to address this or who
do we have?
         MR. BLOMQUIST: Hi, Your Honor, good morning.
It's John Blomquist here for NEO. I'll be taking over for
Mr. Stewart on this term. My understanding, I've been told by
my co-counsel that we are arguing -- in the interest of time,
we're arguing this term along with the related dispute over
probing signal in the PR 2 patent.
         THE COURT: All right. So you're going to address
random access signal from the '450 patent and then also the
probing signal from the '302 patent?
         MR. BLOMQUIST: That's right, Your Honor.
         THE COURT: Go ahead. How many minutes do you think
you need?
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MR. BLOMQUIST: Hopefully 10 minutes, Your Honor, but
we do want to spend some time on this term for sure.
         THE COURT: Go ahead.
         MR. BLOMQUIST: Thank you, Your Honor. Again, this is
John Blomquist for NEO Wireless, and the dispute for this term
and both terms in question here is really about the role of the
specification in construing random access signal and probing
signal. But it's vitally important to begin with what is
undisputed in both of these cases, which is that -- oh, excuse
     I'm not sharing my screen.
         There we go. Can you see, Your Honor?
         THE COURT: I just see a black screen at this point.
     (Pause in proceedings.)
     (Slideshow displayed and shown throughout presentation.)
         MR. BLOMQUIST: Okay.
                                Thank you, Your Honor. Again,
the dispute about this term is really about the use of the
specification. But what's undisputed for both random access
signal and probing signal is that those terms, those terms in
question, convey general concepts that were well-understood at
the time of the invention. Again, using a signal for random
access or for channel probing, those are things that were
understood. The procedures were understood in wireless
communications and that's given with unrebutted expert
testimony in this case.
         Again, Mr. Alberth is saying that both -- there's a
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similar excerpt in his declaration for permanent signal because it's true for both that they were extremely well-known terms in the art at the time of the patent.

So, of course, the claimed elements in addition to these specific terms in both patents that add, you know, a novelty for a claimed invention. But the specific term in question here, "simply random access signal", has on its face a well understood, unambiguous meaning in the art. Once again, this is not part of the dispute. Not only is it unrebutted again on the factual record here, but it's undisputed in terms of attorney argument.

Defendants have used the term -- even today we saw a slide for a different term, talking about random access signals generally. Again, to convey a general concept of a random access signal, the random access procedure, and again, the equivalent for channel probing.

And that's vitally important for this analysis because the recent cases especially from the Federal Circuit all really turn on using the specification for this sort or decisive or definition of the language. When the term is somehow uncertain or ambiguous in its plain and ordinary meaning, basically, when a POSITA would come to the claim term, would it be that they have uncertain or unclear understanding of what that term means in the art.

And that's simply not true here. And in the first two

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cases, the cases cited by the defendants in briefing. Again, the term in question has no plain and ordinary meaning, therefore, we turn to the intrinsic record of the patent. The second case, the wireless hardly has a claim on there, meaning therefore the specification language has the sort of decisive significance.

And again, this World Class is just World Class Tech Corp., 769 F. 3rd, 1120. It's just again another recent case. Again, the claim language when it leaves uncertainty, in those circumstances the terms and specifications resolve the uncertainties.

Again, that's just not the case here.

Both random access signal and probing signal as general concepts are understood in the art. In fact, there's not even evidence in the record that they have an understood or useful meaning outside of this art of wireless communication. These are terms that again convey specific concepts in the art.

So turning back now, with that understanding, the dispute is whether the specification requires limiting or excluding the scope of these well-understood terms, and, again, this must be done through this claim.

And defendants make two primary arguments in support that there has been this claim that we must narrow the terms beyond, again, their well-understood meaning.

And the first is that it's a form of the argument that

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the disclosure does not describe or use other signals for random access or for channel probing. But this splits the entire disclaimer analysis on its head.

The appropriate analysis is not whether the term that has a well-understood scope can include what -- again, what is otherwise a plain and ordinary meaning. It's not whether a term can include it. It's not the supposed absence of disclosure that causes disclaimer. That is all -- again, as has been already foreshadowed, maybe potential written description arguments supposedly from the other side. But for disclaimer in claim construction, it is an affirmative express manifestation of intent that deliberately limits the scope of the claims.

Again, if you otherwise have a plain and ordinary meaning, you need those express statements in order to disclaim.

So we turn to the defendant's second argument, which is -- this is part of the '908 patent. The '908 patent -- oh, I'm sorry, Your Honor. No, please.

THE COURT: Random access signal I guess, if you look at -- it's probably undisputable. You're using it in a specific way I think in light of the context of these claims. Because they're being used at the access signal.

MR. BLOMQUIST: Your Honor, when we talk about context of the claims of the specification, we need to keep in mind,

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again, some clear federal circuit law about even if you describe only one embodiment or if a limitation is shared amongst all of the embodiment, right. That meaning of the disclosure only in both of those scenarios describes things with a certain limitation, for example, or provide the context for a certain limitation, that doesn't mean it's proper to import the limitation into the claims. But it's specifically not used. And, again, that is especially true when otherwise the term "random access signal" or "probing signal" has a well-understood meaning. So again, that is something that is -- I think it's on the next slide here. Yeah. But again, it is simply when we talk about context, to us that's almost a misnomer because really in order to alter the scope of these terms, there needs to be a disclaimer. Because you can't just, again, look at the embodiments or look at the entire description and say, well, it's only described this much; therefore, you are strictly limited to what's described amongst the embodiments. But they don't redefine the words. Again, that is something that is clear Federal Circuit law.

And again, we point to -- in the middle here, I present another recent case, Canedness Pharmaceutical. Just again reiterating this point of law in the recent cases even if

all of the embodiments included a specific limitation, it would not be proper to import those limitations.

And going to some of the statements that are in the patent, which, again, were on the previous slide, Slide 21, this is what defendants point to as the statements, the affirmative statements that supposedly act as clear disclaimer, and they do not.

Especially when looking at, for example, a case like Continental Circuits where, again, just descriptions of the present invention, they dealt with similar statements there, do not cause clear disclaimer on their own. And also from that case, the teaching about the purpose of the specification to fully describe in detail a particular mode of the invention and particular embodiments of the invention, does not mean, you know, fulfilling that purpose, in the Section 112, for example, does not mean that you are, therefore, limited to just that mode. And again that is clear for that case as well.

But that analysis, Your Honor, is all just looking at those statements from column two of the patents in a vacuum. You must, of course, review the specification as a whole, and that's what a POSITA would do when figuring out whether or not there was a clear and deliberate intent to the inventors to limit the scope of these otherwise well-understood terms.

And here are the examples from the patent of contrary statements of those intentions. You know, the detailed

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description of the embodiments is not intended to limit concise disclosure. "The teaching of the inventions herein can be applied to other systems, not necessarily the systems described above. The actual scope of the invention encompasses not only the disclosing embodiment."

So this is not even a case where there is specification language where it's solely uncontradicted that the patentees or inventors intended to limit the scope of their invention and the specification. There is, in fact, contradicting statements about that and, therefore, makes it so it's not clear and unmistakable.

And so on top of that, Your Honor, you know, talking about the fact that these terms have a well-understood meaning in the art and, therefore, already hesitate to override that meaning with context, for example, in the specification, we have another piece of intrinsic evidence, which for the random access signal term in particular is the claim eight of the '908 patent.

Again, we believe that this argument, our position is correct, notwithstanding this, but this creates the strong presumption confirming our position.

And the cases cited by defendants in briefing to dispose of the claimed differentiation point, again, which creates a strong presumption of a correct construction, is simply not apt here. They have not provided a case where its

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disclaimer and that claim differentiation does not overcome

that. And especially in this case, where they're not. They're

arguing, for instance, that it's just context from the

specification that should be imported.

THE COURT: Can I just ask you, if you -- as this

paragraph eight said, it's citing here: "A random access

signal is a spread spectrum signal," why would you object to

random access signal -- (indiscernible.)

MR. STEWART: I apologize. Can you repeat the question, Your Honor? I think I missed the last part of your question.

THE COURT: I said the slide that you have up right now says that the random access signal is an spread spectrum signal." So why would you object to the construction of random access signal that does just that, when it says the same thing that this slide says?

Mr. BLOMQUIST: Well, there are two points there, Your Honor. So, first this is claim eight, the dependent claim of claim one. So the presumption that is from the existence of this claim, in order to not read as superfluous, would be that the random access signal that's being modified by this language in Claim Eight is presumptively broader. So that the random access signal includes in it, scope that is not just a spread spectrum signal. And on top of that, Your Honor, to be clear, we wouldn't even agree necessarily that this is adopting a

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direct sequence spread spectrum signal. This is just a spread
spectrum signal, which, again, might be different in scope,
presumable broader in scope than even a direct sequence signal.
         So that's, again, why we believe -- we oppose the
construction of the intentionally broader Claim One, the
independent claim on which this depends.
         And so with that, Your Honor, I believe that's all the
argument I have for these terms and we appreciate your time
today.
         THE COURT: Very good. Thank you very much, sir.
                                                            So
let's see, from our defendants, who would like to respond?
         MR. CORDELL: Good morning, Your Honor. I think it's
still morning, Ruffin Cordell from Fisher Richardson on behalf
of Honda. And I'll be presenting. Let me see if I can share
my screen.
     (Slideshow displayed and shown throughout presentation.)
         MR. CORDELL: Can you see that okay, Your Honor?
         THE COURT: Yes.
                           Thank you.
         MR. CORDELL: Yes. I'm here to respond to the RAS or
random access signal terms, and what I've got up on Slide 76 is
I took a little liberty, Your Honor, and I put Your Honor's
proposed construction or preliminary construction in the slide
rather than what we had had because, frankly, we like it
better. You took what we had put in, which was kind of a
incomplete thought and you've completed it. And, you know, I
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often say that in these Marksman proceedings we are here in the first jury charge conference of the case. The whole reason why the Supreme Court and Federal Circuit tell us to do these Marksman hearings is to translate these esoteric technical concepts and use something that's accessible to the jury.

And I have to admit the Court's preliminary construction is better than mine. So I admit it right up front.

And, you know, when we look at the -- when we look at the intrinsic record in this case, Your Honor, we think this is pretty compelling.

So we begin with the notion that the specification is just absolutely overwhelmingly in favor of the preliminary construction; that it shows us time and time and time again that the fundamental concept of the '908 and '302 patents is this idea of overlaying these multi-channel signals with a DSSS or D triple S signal. The patent tells us that this is, you know, it tells us right at the outset of the specification that that's, in fact, where this invention lives. And they do it not just in passing; it's not just an accident that they embrace the overlap between multi-channels or MC signals and the D triple S techniques. And it's done for very good reason, for reasons that the patent tells us are critical, critical to the performance of the invention.

So on 581, what I've got is an excerpt. It is indeed

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from Column Two as counsel suggested I might because he knows that these patents are directed to the notion that you're going to use this DSSS technology because it's uniquely situated to be used alongside the open channel approach. And the idea is that you can use this DSSS that has, you know, great properties in this particular context, such as simplicity, self-synchronization and performance under severe interference, which is exactly what happens in an initial random access. And the patent tells us that right at Column two, lines 49 through 53. And it's this notion that you're going to take advantage of both different approaches to mitigate the weaknesses that the patent is really focused on. Critically here, Your Honor, this isn't a case where the specification tells us that this is an option. You might be able to do it this way; you might be able to use D triple S. What we have is a specification that stresses the importance of DSSS, the criticality to the overall function of the system and then tells us the embodiments -- those are the magic words. The embodiments, plural, of this invention, use the combination of MC and DSSS signals. What the law tells is when the patentee chooses to use that term, a clear statement of specification, that the invention or the embodiments of this invention, or the present invention, all those are magic words that patent lawyers then

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say, okay, you're telling the whole world, you're telling the public that your invention is directed to this concept, and that has a couple of impacts. Number one, it means you have ownership of that concept and you have ownership of using DSSS in a random access signal context. But it also says that that's what we own. They are setting the boundaries of what they actually own. And in the Microsoft case that we cite, makes it clear that when the patentee chooses to do that, we didn't write this patent; we didn't tell them to do it. When they choose to do it, they have to be held to their word.

They have to be true to their word, and the patent has to cover what they told the whole world it would cover.

The other magic words are all the embodiments. just saw that as a specification, all embodiments plural of the present invention are broad and unequivocal.

And, again, they choose those words. They choose to come into the patent office with that specification and they have to be held to it.

The other thing that struck me, and I'm stepping forward a little bit, Your Honor, to '588 is the ubiquitous nature of their reliance on DSSS.

I counted, there were over 125 references to DSSS. But importantly, there were no references to any other modality for carrying out a random access signal.

You know, I have not convinced the Federal Circuit to

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write a case that talks about the ubiquitous claim construction canon just yet, but it should be there, because of ordinary skill in the art leading this specification is confronted with the fact that DSSS is used over and over and over again. And again, they have to be true to their word.

The Wireless Protocol Innovations case tells us that repetition, in fact, does have an impact on claim construction. That, you know, taken with the uniformity of the specification, then maybe I do have my ubiquitous canon of claim construction after all. You can't go into the patent office, tell them that your patent is directed toward providing a random access signal using a DSSS signal, and then walk it back when it comes time for litigation. That's just not the way the system works.

We did have a bit of prosecution history on this term. There was a little back and forth between the patentee and the patent examiner. And as Your Honor knows, this is often very illustrative and we will see the true intentions of the patentee and the true understanding of the patent examiner as we look at their correspondence. A little bit like a draft history in a contract negotiation. You know, those red lines tell us a lot -- what arguments did they make; what did they say about it?

It's -- I guess you would call it parole in a contract dispute, but here it's intrinsic. It's part of the actual record.

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And we know that they were debating. The examiner said, "You know, I don't know what you mean by this disclosure of the initial random access signal by some time duration and the guard period length."

He was unclear that -- whether the disclosure itself actually told him what that was. So the applicant responded. And here they said, this feature, the random access signal feature, this feature is illustrated at least in Figure Five and then described in Paragraphs 34, 35 and 63.

Well, let me show you those, Your Honor. This feature, it turns out is in Figure Five.

And I apologize because I know this is somewhat hard to read. But you'll see that there is an OFDM signal. This is the multi-channel signal shown as Elements 512. And then there's a spread spectrum signal, Number K. And they're pointing to this spread spectrum signal, Number K, as being the random access signal.

And then when we would go to the paragraphs that they cited, we see, in fact, that these are DSSS signals. So in the middle of Paragraph 35, it says that are synchronized, for example, DSSS signal Number K in Figure Five.

So, again, over and over and over again, the patentee chose to point to these DSSS signals as the random access signal.

NEO, I heard an argument suggesting that perhaps this

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is just one embodiment, but that is just not true, Your Honor. You can study it in every single embodiment of this invention, this specification, the patentee pointed to DSSS signals and nothing else.

You know, we had a little bit of discussion about whether the specification involves -- it can somehow be imported into the claims, and that's not what we're doing here.

What we're doing is we're holding the patentee to its word. What the Federal Circuit told us in *Phillips* is the specification is often the single best tool that we are to use to interpret the patent claims.

And that's exactly what we're doing. There's no importation here. And if I can -- let me just jump ahead a little bit and talk about claim differentiation. Counsel pointed you to Claim Eight and said, well, in Claim Eight, they talked specifically about DSSS signals or at least DSS signals, I guess, it wasn't direct. But the fact of the matter is, Your Honor, claim differentiation is one that we have to be really careful about using. The Federal Circuit has called it a weak canon of claim construction, if a canon at all. Because we, as patent lawyers, are trained to vary our claim patterns, to add details sometimes recursively and so you have to be really careful about trying to use claim differentiation as a primary basis to construe the claims.

If I can be heard for just a moment on counsel's

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argument with respect to disclaimer, we see this in all these cases, that the patentee will come in and say, no, no, no, you can't look at the specifications, you can't look at the prosecution history unless you get to the level of a disclaimer, but that's a little bit of an overstatement -- it's a lot of an overstatement. What disclaimer law tells us is if my claim says four-legged mammal and everybody understands what a four-legged mammal is. It's precise, it's -- everybody knows what a four-legged mammal is. And in your specification or your prosecution history, you says it doesn't count for horses. The horses will not be covered by this patent. That's a disclaimer and that can be used to limit the claims. That's not what we're doing in this case. In this case we are using the specification and the unanimity, the ubiquitousness of the reliance on DSS to properly frame RAS for this jury. That's entirely appropriate and the straw man of suggesting that we have to reach a disclaimer is exactly it, it's a straw man. It's a bridge you don't need to reach because it's just not appropriate here. So with that we believe the Court's proposed construction is exactly correct, and we think that the

construction should be a direct sequence spread, spectrum signal -- excuse me. Used as a random access signal.

And then, Your Honor, we had talked about maybe covering the '302 claim as well here. And if I can jump ahead

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to Slide 132. This is the probing signal element. And the arguments are pretty much the same. I can take you back through the slides and you'll see over and over again that the probing signal is also equated with a DSSS signal. If I can go to, for example Slide 137. It talks about using DSSS for channel probing in Column Two, lines 44 through 50 again. Again, they stress the signal properties of simplicity or self-synchronization performance but what I would like to do, if I could, Your Honor, is to race ahead a little bit to the slides that are sort of unique for this element which -- I can't quite type this morning There we go. And that's the prosecution history on probing signal is a little bit different. So in the specification the inventor tells us that channel probing uses They're quite candid. It's very straightforward, and they claim one of the advantages of using DSSS as a probing signal and that's at Column Nine, lines 31 through 35 from Slide 147. But then in the prosecution's history itself at Slide 148, the applicant itself equated DSSS with probing signal, and they did it in a signal phrase. Specification describes various schemes that may be used to minimize interference between the DSSS, paren, probing, paren signal and the MC or multi-carrier signals. So they made their case very clear here, and this is

not a situation we're trying to interpret something that was a thinly veiled reference or an accidental, you know, slip of the draftsman. They've done it consistently; they've done it repetitively; they've done it in the specification; they've done it in the prosecution history and in having told the world that that's what their patent is all about, they need to be held to it.

So, with that, we think the Court's preliminary construction is correct, and I'll pass the podium unless Your Honor has any questions.

THE COURT: I thank you very much. Is there any response?

MR. BLOMQUIST: A couple brief points, Your Honor.

We've heard, I think, a few times the phrase from opposing counsel about telling the world what your invention is. And, of course, basic claim construction law discuss the claims.

The claims provide the notice, the claims provide the metes and the bounds. And that's why the analysis starts with the claims.

Interestingly, the analogy about altering, you have a well-understood term is apt here that opposing counsel gave. We have a four-legged horse. A random access signal is very similar in that regard and, in fact, the unrebutted testimony here is similar and to exclude something from the scope of that well-understood term, you do need that express disclaimer of,

but not horses. Right? That's exactly what we're talking about here.

As far as turning to the specification, this ubiquitousness argument has been squarely rejected. That's what Thorner has talked about in the cases like it. You know, talking about again, even if all the embodiments discussed in the patent including specific limitation, it's not proper to import it. Again, you can use it throughout your description, throughout your description of the specific mode that you're talking about, and that does not mean whether it's ubiquitous or otherwise that you limit the claim scope of a term that has an ordinary meaning.

And the term -- again, the affirmative statements of disclaimer of the patent talking about the embodiments, you know, confidential -- on similar statements, and again those do not rise to the level of disclaimer.

THE COURT: Thank you. Thank you very much. I think we can move on then to the next term and in this case, we are talking about the seventh one here, and that's the time frequency resource --

THE COURT REPORTER: Judge, I apologize. I'm having a hard time understanding you on this one. This is the court reporter.

THE COURT: I'll speak up nice and loud here. So we are talking about the sixth one here -- I'm sorry, the seventh

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one and that's the time frequency resource unit. So let's hear
some argument on that one. That's from Patent '450, claims
seven and eleven. So who would like to address that for
plaintiff?
         MR. HAMAD: Good afternoon, Your Honor. This is Hamad
M. Hamad for NEO on the time frequency of the first unit.
                    How much time would you like, sir?
         THE COURT:
         MR. HAMAD: I think about five minutes, Your Honor.
         THE COURT: Go ahead.
         MR. HAMAD: Thank you. So on this term, Your Honor,
the first thing I just wanted to start off by pointing out is
that the heart of the defendants' proposal here is disclaimer.
Just for purposes of the record, I wanted to point out that as,
we relay on our briefing, we don't think that they have met the
disclaimer standard here, Continental and Thorner, we've heard
a lot about them today. In particular, they explain that
contrasting and comparing the prior art in the context of an
embodiment of an invention is not enough for disclaimer,
criticizing the art is not. And then even having only one
embodiment described throughout the specification would not be
enough for a disclaimer.
         I'm going to actually jump to the Court's proposal
here.
         I'm sorry. Let me share on the screen.
     (Slideshow displayed and shown throughout presentation.)
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MR. HAMAD: And this is, I guess, where I would like to spend some time. The Court's preliminary construction, from our view, still does a little bit of the disclaimer and importation of some of those statements from the IPR. We do think the Court's preliminary construction rejects most of the most problematic issues from the defendants' proposal and, you know, more closely aligns with how we think the law and the statements from the IPR should fall out.

One thing I wanted to display here is when you put the Court's preliminary construction into the claim language, you end up getting this repetition or this redundancy of the mention of the number of symbols and subcarriers. So the plain language itself already gives elaboration on what a time frequently resource unit and it's this bolded, italicized portion, where the claim says that each unit containing a set of frequency subcarriers in a group of OFDM symbols, where

N equals 248. And so with the Court's construction we would have a mention of symbols and subcarriers of twice and we think there's some potential confusion that could be introduced there.

So, you know, while our primary position is still that there should be no disclaimer for this term, and that it should just accord its plain and ordinary meaning as even Volkswagen in its IPR stated or took that position, if the Court was inclined to nonetheless construe it using its preliminary

construction, we would propose a modification for clarity here. 1 2 If we take the Court's regularly shaped phrase and we include it into the term -- or for the term, time frequently 3 resource units, leaving an undisturbed the each unit containing 4 a product frequently subcarriers in a group of OFDM symbols, 5 leaving that phrase undisturbed so we don't get a reputation of 6 symbols and subcarriers where there's potentially some 7 confusion. And that's all I have on this term, Your Honor. 8 9 Unless you have any questions, thank you. 10 THE COURT: Very good. Thank you very much. So who would like to respond on behalf of the defendants? 11 MR. ERICKSON: Your Honor, Brian Erickson with DLA 12 Piper representing the Toyota defendants. I'll respond here. 13 THE COURT: You can have five minutes, sir. 14 MR. ERICKSON: Slide 101, Your Honor, the key dispute 15 is whether NEO's wireless disclaimer in the IPR was clear. 16 Ιn fact, it's the only legally relevant dispute before the Court 17 and it's dispositive of the construction of this term. 18 19 Going to Slide 102, what we have here on the left is the penultimate paragraph used by NEO Wireless to clear this 20 2.1 patent of Dell's IPR. I say it's the penultimate paragraph, Your Honor, because there are approximately eight pages worth 22 of argument that NEO Wireless made building up to this 23 paragraph, all about the specification, comparing it to the 24 prior art, and talking about embodiments, but NEO wireless knew 25

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that wasn't enough. NEO Wireless knew that the board at the patent office doesn't care whether you distinguish the prior art in the embodiment. That won't cut it.

They had to distinguish the prior art from the claims, and to do that, they got to this paragraph. This is the conclusion. This is the penultimate paragraph. After this paragraph, they begin using this disclaimer to distinguish prior art.

So let me parse this paragraph briefly, Your Honor. The first sentence you see starts "The inventions." One diminishable basic resource unit or quote, time frequency resource unit, close quote, as recited in the independent claims.

Let me stop there, Your Honor. That is a remarkable introductory phrase when it comes to patent law. This is a patent that is — at the time was in co-pending litigation with Dell. This is an IPR, the lawyers and NEO Wireless knew anything they said could and would be used against them and to start this paragraph that way is the reddest of red flags. And that leads us right into the disclaimer itself. So after clarifying and talking about invention and the quoted claim term as used in the independent claim, they state, quote: "A time frequency resource unit is not an arbitrary combination of time and frequency units and is, instead, designed according to the application requirements of the application that is being

grouped."

Now, NEO Wireless started there in the negative, and let me start with that first phrase, Your Honor. If you take time frequency resource unit out of the intrinsic record, if you take it out of the patent, ignore the specification, ignore the file history, and you just look at the words "time frequency resource unit," it is an arbitrary combination of time and frequency units. Right? It can be three time units and three frequency units, or maybe five of each. It's arbitrary. Any combination of those could be used as a unit.

So what we have here is a clear and unmistakable disclaimer of the ordinary meaning. So NEO Wireless's proposed construction has been disclaimed. And that creates a massive void, Your Honor. When one of ordinary skill is reading this and sees the patent owners say, "I don't want the ordinary meaning. This as used in the claim is not the ordinary meaning," there's a massive void there and something must fill that vacuum. So once they've erased the ordinary meaning and writing on a blank slate, they define precisely what they mean in the claim for this term. They say it is instead designed according to the applicational requirements of the application that is being grouped.

You see defendants' proposed construction on the right here? Faithfully and verbatim takes that language as the proposed constructions.

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So the IPR here, this statement, is clear, it's unmistakable, and, in fact, Your Honor, it's really -- were uniquely postures here where it comes to this type of claim construction dispute, because NEO Wireless never addressed this We brought it up for briefing in our meet and language. confers and we told NEO Wireless, we're using your language, we're quoting your language. Tell us why it's not clear. Tell us what the possible mistake would be. And Neo Wireless choose not to address it in its opening brief. That was frustrating. We thought they were sandbagging us in bringing it up in their reply, but then they didn't address it in the reply. This is like having a clear contractual term and one party says the clear contractual term supports us and the other party doesn't They just address parole evidence or address the contract. There is really no genuine dispute in material fact that this statement is clear and unmistakable. There's no ambiguity here. NEO Wireless and its expert don't come back and say this is confusing. Here's where something, a person of ordinary skill

Here's where something, a person of ordinary skill might think I don't know what you mean here. This is ambiguous. This isn't clear. We can mistake it for something else. There's simply no clash on this issue, Your Honor. This is legally dispositive. This is a clear and unmistakable disclaim of claim scope. It's not the ordinary meaning. It's the meaning they assigned it here.

What NEO does argue, NEO Wireless spent in most of its brief, it spends time discussing what it alleges are other disclosed embodiments. Now it factually incorrect, Your Honor. And I don't have time to go into why it's factually incorrect but legally -- what's important is that legally it's irrelevant.

It doesn't matter how many other embodiments you might have disclosed. Let's assume that one embodiment grouped applications and designed the units according to the application requirements of the application that is being grouped. Let's assume that's only one embodiment and let's assume there are 12 other disclosed embodiments that do it differently. It doesn't matter, right? This is a disclaimer. They said not the ordinary meaning, maybe we could have claimed more, maybe be could have made a different disclaimer, maybe we could have said designed according to common parameters or something broader. Maybe they could have done that, but they didn't. This is the disclaimer they made and this is the disclaimer they used to free this fact from the IPR. The public, including the defendants, are entitled to rely on it.

Briefly, Your Honor, the Court's preliminary construction doesn't go far enough. This is a disclaimer. It is all or nothing. The Court's preliminary construction of a regularly-shaped unit having a fixed number of symbols and subcarriers, it does not accurately reflect this disclaimer.

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In other words, you could have a regularly-shaped unit with a fixed number of symbols and subcarriers, again, maybe three of each, right? That would be regular. It would never change. Every application and every communication would always have to use it, no matter how inefficient it was. So it would be regular, it would be fixed, but it would still be arbitrary. There's just a number that had been picked. It's arbitrary with respect to the application being briefed. So it does not accurately reflect this disclaimer. Additionally, jumping forward a few slides. Court's preliminary construction would exclude all disclosed embodiments. I'm sorry, Your Honor. THE COURT: I'm saying we're getting close to the end of your argument. MR. ERICKSON: Yes, Your Honor. In the only disclosed embodiment it uses one size unit, it designs one type of unit for voice applications and it uses a different unit for video applications. This is the only disclosed embodiment that is discussed at length by patent owner in the IPR as well. they're not regular and they're not fixed. They're irregular as you go along and they change as you go along, as you go into different application groups.

Looking back to the actual disclaimer, Your Honor, there is this -- in sentences three and four in this penultimate

paragraph. It does talk about regularly shaped units, but it's 1 regular in the context that it's regular for the application. 2 If you look at each of these phrases, if you see my cursor, it 3 states regularly shaped time frequency resource units allocated 4 at the application granularity level. So they change. They're 5 irregular when you switch to a different application, but 6 they're regular for that application. And then the same thing 7 with the final sentence, the regularity of the time frequency 8 9 resource unit only became unlocked due to the similar resource 10 requirements has been used of the same application. So in sum, Your Honor, there's really no dispute 11 before the Court. There's no argument by NEO Wireless that 12 this is somehow a confusing or might be mistaken for something 13 This is a clear and unmistakable disclaimer, and that's 14 The fact that the patent could have said something is 15 irrelevant. 16 That's all, Your Honor, unless you have any questions. 17 THE COURT: Thank you, Mr. Erickson. 18 19 So would you like a brief response? MR. HAMAD: This is Hamad Hamad for NEO. So the first 20 thing that I want to address is this notion that in our briefs 21 we didn't respond to defendants' arguments about the alleged 22 IPR disclaimer according to our opening brief Document 127 at 23 24 pages 23 to 24, where we directly address this. In our reply brief, document 133 at nine, where we cite Mr. Alberth's 25

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declaration, Paragraph 41, where he also addresses this. So I'm not sure where that comes from.

I want to -- let me share my screen very briefly.
(Document displayed.)

MR. HAMAD: This is Mr. Alberth's declaration on this point that I wanted to make. The point that I -- I'm sorry, Your Honor.

Our argument in the brief was that IPR references did not suggest one dimensional time frequency. These are excerpts that defendants rely on -- I'm sorry. These are excerpts from the pauper that the defendants rely on. And Figure six in particular that was used in this discussion is an embodiment that relates to WiMax. It uses WiMax in the invention. And that was the most relevant embodiment to respond to Dell's IPR that asserted WiMax itself had an exemplary embodiment. So this walks into the *Continental* case, saying if you are contracting and comparing prior art with respect to an embodiment, that is not going to be a disclaimer for all aspects or all scopes, or all embodiments of the invention.

The last point I wanted to mention, counsel said that the Court's preliminary construction would exclude the embodiment from the invention. And I think the focus there was on actually Figure Six, but the Court's preliminary construction is not that a zone is regularly shaped, but rather a unit, a resource unit is regularly shaped. And I would point

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the Court to Figure Nine, which was actually something that was
    cited in defendants' identification of intrinsic evidence when
    we were doing exchanges and Figure Nine describes application
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    zones and then says, "The zones that are not used by
    applications," which is another reason to not limit it to just
 5
    application-based grouping. You have these zones called
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    Special Resource Zone and Figure Nine explains special resource
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    zones may be irregularly shaped. But then goes on to describe
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    that they have subdivisions of predefined, kind of equal in
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    size, equal in shape resource units.
              So I don't think the Court's preliminary construction
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    would want to follow that. We would just propose, as I
12
    mentioned, this modification for clarification and not to have
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    a duplication or redundancy of those terms, symbols and
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    subcarriers.
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              Thank you, Your Honor.
              THE COURT: Thank you.
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              So that will complete our argument regarding the
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    seventh term.
              So let's move on to the eighth term and that term is
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    from the '941 patent, and the Claims 8 and 13. And that phrase
    says, "The antenna transmission scheme comprising as
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    transmission diversity scheme or a multiple input, multi-output
23
    (MIMO) scheme."
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              That's the phrase that we're talking about there.
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And who would like to address this? 1 2 MR. STEWART: Your Honor, that will be me, Chris Stewart, on behalf of NEO Wireless. 3 THE COURT: How many minutes would you like? 4 MR. STEWART: Five. 5 THE COURT: Go ahead. 6 MR. STEWART: So for this term and there's a similar 7 dispute with the next term, which is related to corresponding 8 9 subchannel configuration. I think the dispute here really 10 arose from the long -- the history of having a prior litigation where there was negotiation with Dell in a previous case that 11 led to an agreed construction. That's obviously sort of an 12 unwieldy process and the difficulties inherent in language and 1.3 trying to be precise in these sort of things, led to what is 14 the dispute before you today, whether the words "alternatively 15 indicate" that we included in the agreed Dell construction 16 means something different than what we intended them to mean. 17 I think at the bottom, your preliminary construction 18 19 does a better job than we did in the agreed construction with The point here is simply that the intended transmission 20 scheme can indicate it's capable of comprising either a MIMO 2.1 scheme or a transmission diversity scheme, but not at the same 22 23 time. 24 The progression of the Dell negotiations, which is evident in the defendants' exhibits, which are email exchanges 25

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with Dell, show that our concern was, okay, we agree it has to
support both schemes, MIMO and transmit diversity, but we just
don't -- we want to be clear that it can't do both at the same
time. We don't want to accidentally agree to a construction
that makes it nonsensical, that it has to at least
alternatively indicate one or the other. Meaning they are not
being indicated at the same time.
         Your preliminary construction I think captured that
for both of these terms without adding any unnecessary
additions and it avoids any disputes over whether there is some
sort of exclusivity and alternatively indicate that goes beyond
the scope of the claims and the intentions of our previous
construction.
         THE COURT: All right. Thank you very much, and who
would like to address this regarding the defendants?
         MR. HILL: Your Honor, this is Reggie Hill and I'm
going to address this on behalf of the defendants and I think
I'll try and treat the two terms together as Mr. Stewart did as
well.
         THE COURT: Very good. We'll be dealing with eight
and nine then. And so you can have five minutes as well.
Mr. Hill, go ahead.
         MR. HILL: Thank you very much. So we're start with
Slide 110. Just to set the context, Your Honor, which I
actually believe you have in hand, but it would be helpful for
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some of the discussion going forward here. The title of this is "Method and apparatus for Multi-carrier communication system with adaptive transmission and feedback." So you've got some communication system that has to adapt and we've be talking about this going forward.

But it's helpful to keep it in the context that it has to make some choices in order to be adaptive and I think these claim terms get at that choice. Because if you go to the next Slide 111, it's just a term there. I think we can skip to the next slide, which is 112. And I've just shown here a bit of context of the language that's in Claim Eight.

Your Honor probably realizes this, but Claim Eight is a method claim. Claim 13 is an apparatus claim, but the language that is at issue is basically the same for the two of them. But in either case, as indicated here in Claim Eight, you see the portion in green talks about this as being a control message. And the way that this adaptive feedback is happening according to the '941 is via a control message that's going from the base station or being received by the mobile station or the mobile phone.

So there's a message and then that message has in it some transmission parameters. It's those transmission parameters that are further described in the highlighted in yellow language in this Slide 112 that get at the two claim terms. So these are really things that have to be in a message

going forward.

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If you go to Slide 113, please.

And so Mr. Stewart is right. The defendants started this with the proposed construction that existed in the file history, which included the Dell litigation, and you can see that what looks like gray to me, the gray language as opposed to the yellow highlighted language. The gray language is basically the same between the constructions. You have the yellow highlighted language that gives some differences. The main difference is being this alternatively indicated language, which it looks like the Court is included in Claim Nine, but not in Claim Eight in terms of the preliminary construction that we had.

But if you move to the next slide of ours. This slide, Number 114, just really shows exactly the proposed construction from the Dell litigation and it's exactly the same, at least for this claim term eight as what was proposed by -- agreed to by NEO in the Dell litigation.

I think you can move to the next Slide.

And 115 is consistent with NEO's position. NEO's position has been that they agree with the Dell Construction. And I think it's Mr. Stewart who intimates there's some commonality between the constructions that are being given here.

So with that, would you move to the next slide?

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I won't dwell on it, but for the Court's benefit, there's an indication of where, at least for the first term, the support is in the '941 specification and you can see clearly it's a choice between transmission diversity, which is about improving transmission robustus.

And so you're sending in most cases, multiple information to be received so that you guarantee its receipt versus the, what we call the MIMO, M-I-M-O, schemes which are used to improve transmission throughout, which means you're sending information at the same time in multiple -- over multiple channels so that you can improve how much information is being sent in a particular time.

If you can move forward, Mr. Murray, that would be good.

The alternative indicate language comes directly out of the claim, where they say you indicate or, you know, which the or Is between the transmission diversity schemes or the multi-input-outputs, and then I would also indicate that the lower language which relates really to Claim Nine, there is about the corresponding channel configuration and the claim language says, "Characterized by distributed subcarriers for localized subcarriers in the frequency delays," really represents the second choice and that's where the support is for the alternative indicate language.

You can move forward to the next slide, please. I

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think we can skip Slide 118 and 119 which really dealt with, I think a dispute that's not actually a dispute between the parties.

If we would go to the second term, which is Claim

Nine, which deals with these -- the corresponding subchannel

configuration, again, I want to reflect that this is a message

and in that message there has to be an indication of which of

the subchannel configuration are actually used. One that has

distributed carriers or localized subcarriers.

As a part of the construction from the Dell litigation, there was some language in there to say to avoid any doubt, this requires supporting both of the alternatives, whether you're talking about for Term Eight or Term Nine. And I see that language made it into Term Eight. It did not make it into Term Nine, which the Court made more consistent, I believe, with the PTAB. So there's some question in my mind as to whether there might need to be some level setting or trying to make them correspond more appropriately for a judge or jury.

But it's important that the alternative indicate language be in both, and that in order for the message to be able to be chosen between two alternatives, obviously, the system must support both alternatives.

If you move forward to 121.

This just shows the difference between the alternatives. At least it's in the initial meet and confer

process, NEO was not including the alternative indicates 1 2 language in this term, which is number nine in the Court's listing of preliminary constructions, but the language is there 3 in the Court's construction, and we believe that that is 4 appropriate. We believe that the language could also be in 5 Claim Term Eight to indicate that their alternatives, both for 6 consistency and because I believe the claim language also 7 supports that. 8 If you can move forward. THE COURT: Let me ask you, counsel, why so focused on 10 the word "alternative?" So in the Court's proposed 11 construction for eight, it's clearly an either/or. When you 12 say "alternatively indicate" you mean something is different 13 than either/or? I mean --14 MR. HILL: No. I don't think it means anything 15 16 different, Your Honor. I think it was put there to make sure that it was a choice between those two things, and I believe 17 the language -- I'm not sure in regular parlance which one 18 would be more palatable to a jury, but I don't believe -- I 19 think it's the alternative choice between those two parameters. 20 2.1 It's just stated differently in the two constructions. I don't know if people will think that means that has to mean something 22 different or not. 23 THE COURT: Your main point is that you want to use 24 language such as indicates alternatively or alternatively 25

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indicates or in some way or another, that they are alternatives
to each other so that it's clear that it's an either/or
situation?
         MR. HILL: That's accurate, Your Honor. And in
addition to that, it should be made clear that there must be
support in the system for both of those alternatives. In other
words, it wouldn't be enough that you only supported one and it
indicated that one. So you have to ask the Court for both of
those.
         THE COURT: All right. Thank you very much.
         MR. HILL: If you can forward again.
         THE COURT: You're just about out of time, so why
don't you wrap it up.
         MR. HILL: All right. I think that really covers the
issues, Your Honor, unless you have some other questions with
respect to both eight and nine.
         THE COURT: No. I think you've done a good job
clarifying that for me. So thank you very much.
         Is there any rebuttal?
         MR. STEWART: Yes, Your Honor, if I can respond
briefly. This is Chris Stewart.
         May it please the Court, sorry.
         THE COURT: Go ahead.
         MR. STEWART: Okay. I talked over you for a minute
and didn't mean to. I think we understand each other. The way
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Mr. Hill just characterized the dispute, I don't think there is
     We agree that they have to be alternatives. It's one or
the other and that you have to support both. The dispute in
the briefing, which it sounds like it's no longer a dispute,
was whether them acting as alternatives to each other also
meant that the system as a whole could also not support any
other schemes in other contexts. We thought they were trying
to import this additional thing and it sounds like that's no
longer in dispute, in which case we have no issue on that
point.
         The one other thing I'd raise is there was a dispute
just for Term Nine, the subchannel configuration. That was
addressed in the briefing about whether the indicate language
in the claim term requires an actual, distinct indication. You
recall that? I didn't hear that addressed by defendant
counsel, so that's no longer in dispute and we're just dealing
with the Court's construction as it is, then there's nothing to
address.
         I just wanted to make clear that to the extent that
it's still in dispute, we obviously think that the subchannel
configuration is characterized by certain subcarriers, not
necessarily accompanied by a second indicator.
         THE COURT: All right. So thank you, Mr. Stewart.
         I did want to turn to Mr. Hill briefly. So
Mr. Stewart is indicating that after listening to you and
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indicating that he sees your position as one which states that
as long as it's clear in the language that we use here, that
it's an either/or situation and that whichever of these two
systems is used is adequately supported, that he doesn't
disagree with you. Do you agree that you don't disagree with
him either?
         MR. HILL: (Zoom audio muted.)
         Okay. I was on mute, I'm off now, I'm sorry.
         The characterized language that is not in the Court's
construction and what's there is that it indicates as
alternatives distributed subcarriers and localized subcarriers.
So we believe that that is accurate. I believe that that
addresses what Mr. Stewart was referring to.
         But the characterized language is not there.
there's certainly no dispute with what the Court has with
regard to the alternative indicate language in the
construction, the preliminary construction.
         THE COURT: By that you mean that you like the Court's
proposed language and still oppose the plaintiffs' proposed
language, but the general description that Mr. Stewart just
gave, you don't dispute that; is that right?
         MR. HILL: It's a little bit unclear to me what
Mr. Stewart is saying, but I know that I agree that
alternatively indicates language needs to be indicated
in -- for this choice needs to be indicated in the message as
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specified in the Court's preliminary construction.
         THE COURT: All right. So if I'm following you
correctly, what's your position regarding what we just heard
from Mr. Stewart, you agree that there's not a dispute anymore,
setting aside the precise words to be used, do you agree that
you look at it the same way?
         MR. HILL: I don't think there's a dispute that I'm
aware of, given where we are right now, Your Honor. I think
the language "characterized by", is not in the construction,
and, therefore, the construction that the Court has given and
the one that was proposed by the defendants that had the
indicating alternatives resolved any dispute.
         THE COURT: All right. Thank you very much.
         MR. STEWART: May I respond briefly to that?
apologize.
         THE COURT: Sorry?
         MR. STEWART: May I respond briefly to that just to
make it clear?
         THE COURT: Go ahead.
          MR. STEWART: This is Chris Stewart again for NEO.
just want to be clear that we don't view the removal of the
word "characterize" as actually the Court adopting in its
preliminary construction the idea that there has to be a
separate indicator flag. So if that is still in dispute, I
just want to make clear on the record that we still do not
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agree that the scope of this term requires an indictor flag
distinct from just the designation of the subchannel
configuration itself. If that's still in dispute, maybe it
ends up just being a factual issue that the experts battle
about it at trial, and you don't have to resolve it. But if
Mr. Hill is saying that is still a dispute and they're
interpreting your construction as requiring that, requiring
that indicator flag, I just wanted to make clear that we would
still dispute that and maybe we'd propose some additional
clarifying language in the Court's construction to the effect
that it is not so limited in that way.
         THE COURT: Okay. The Court is somewhat encouraged to
say whatever at this point. I hear what you're saying on both
sides. We'll take a look at it.
                     Sorry for belaboring it.
          MR. HILL:
         THE COURT: You guys are not very far apart, but okay.
         So let's -- I think we finished ten already because
that was the probing signal. But 11 has some additional
language that's also in front of the '302 patent and that
language is as follows: It says, quote, a probing signal is
configured to occupy a portion of spectrum in the uplink
frequency banner, not designated for transmission of uplinked
control signals in the system, end quote. So the plaintiff can
be heard on this. And so go ahead, sir.
         MR. BLOMQUIST: Yeah, Your Honor. Good afternoon now.
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This is John Blomquist for Neo Wireless. And I'm grouping
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    these terms together and I just want to make sure that I am
    grouping them correctly. The defendants have grouped them
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    together as, quote, antecedent basis terms, and the -- I'll be
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    brief on it. It's essentially they just want to import and add
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    words from the preamble throughout the specification -- it's
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    not the specification. The claim, excuse me, based on the
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    agreed construction and the fact that the preamble is limiting
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    and the sole basis for this is proposed is that it is to aid
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    the jury and results in curing jury confusion.
                                                    We see it as
    the exact opposite. It simply is going to make it hard for
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    people on the jury, especially when it be the judge's role and
    not the role of the parties or experts to instruct on how to
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    effect antecedent basis in the claims, for example.
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              THE COURT: I'll give you five minutes.
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              MR. BLOMQUIST: Your Honor, that's really all I had to
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    say about it.
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              THE COURT: Okay. Very good.
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              And who would like to respond regarding this language
    that we have in 11?
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              MR. TAPPARO: Good afternoon, Your Honor, it's Robert
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    Tapparo for FCA.
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              THE COURT: Go ahead.
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              MR. TAPPARO: Like opposing counsel, I want to keep my
    argument short. Our construction is clarifying for the jury
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something that both parties actually agree on. During
briefing, both parties have agreed that the preamble is
limiting and NEO doesn't dispute the recitations as you -- let
me share my screen really quick. This will illustrate my
point. Recitations of broad system in red in the claim really
refer lack to the orthogonal treatment of the individual
multiplexing or OFDM system. All defendants' proposed
construction is trying to do is clarify that each recitation of
"the system," is just referring back to the preamble, which
regardless of whether or not the preamble is limiting in this
case, which it is, both parties agree to that. This is an
antecedent basis rule to where "the system" refers back to the
Orthogonal Frequency Division Mutliplexing System. That's the
extent of our argument and we just believe that this would
clarify the point for the jury because they might not
necessarily understand the antecedent basis rule or "the
system" refers back to the OFDM system. Thank you, Your Honor.
         THE COURT: Thank you very much. I appreciate hearing
from both sides on that one.
         So let's move on to our Number 12 and that's also from
the '302 patent. It's Claim 23. And that phrase is as
follows: Quote, A receiver configured to receive a request
from a probing signal from a base station in the system.
         So that's a disputed term and I guess I'll hear from
either Mr. Stewart or Mr. Blomquist.
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MR. BLOMQUIST: Yes. This is **Bill Blomquist again
for NEO Wireless. So just to be clear on the record, Terms 11,
twelve and 13 and both my brother's side can tell me, you know
if he disagrees. I believe we're putting those together again,
Claim Term 11, 12 and 13 all are being changed or proposed to
be changed by defendants for the same reasons. And I guess
given the opportunity again, just maybe in reply to state that
the basis somehow, the antecedent basis rule, that rule is a
rule of validity. There's no dispute here that "the system" as
in the claims is somehow invalid or not specific as to what
system it's referring to as far as, you know, "the system."
         I see the basis of that is clear. And so to require
this -- there's no requirement in the antecedent basis rule to
add this language. That assertion is not a basis to adjust
these claims as proposed.
         THE COURT: Got you. And you're correct, these are
all together in one. And so let's just have whatever response
is made as to this issue addressing both 11, 12 and 13.
         MR. TAPPAN: Your Honor, I have nothing further to
     I think my last argument captured our point. Thank you.
         THE COURT: Thank you, sir. Very good.
         So we're gaining on it here and so we're at Number 14
at this point and that phrase is from the '512 patent and it's
Claims 15 and 23 and says, quote: "Whether the first and
second pilot subcarriers must be received in at least one of
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the time slots." 1 So who would like to address this? 2 MR. HAMAD: Good afternoon, Your Honor. 3 Hamad Hamad again for NEO. 4 THE COURT: Good afternoon. 5 MR. HAMAD: I think I'll need about five minutes for 6 7 this, Your Honor, or less. I think that the essential dispute here is what does 8 9 the plain language of the claim mean? Your Honor, our view of 10 this is that the claim term should have its plain meaning, but just from kind of the meet and confer process, and as, you 11 know, just from prior litigation, we suspected that there might 12 be some difference of opinion about what that claim language 13 meaning is. So we proposed this clarifying construction that 14 adds the word "same" before time slot in view of a person of 15 ordinary skill in the arts' understanding of the plain meaning 16 of the claim language. 17 And so NEO'S expert testimony is the only record 18 19 evidence of what a person's understanding of the term would be. Mr. Alberth explains that pilots and other signals are 20 necessarily going to be transmitted in some time slot. So when 2.1 you see the claim language, the first of the plurality of 22 subcarriers and the second plurality of subcarriers would be 23 understood to mean that there is at least one time slot where 24 both of those carries are transmitted and then subsequently 25

received at least one time.

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He explains this in conjunction with Figure Five, and then in reply or in response from the defendants, there was this argument that Figure Two would be excluded or would contradict the proposal. I would just like as a background, Figure Two is just showing the basic structure of a multi-carrier signal. There is only one set of pilot subcarriers here. So it doesn't show something inconsistent with it, and it wouldn't be excluded by the proposal because NEO's proposal doesn't require that both pluralities of the subcarriers are received in every time slot together, just in at least one of the same time slots. So you could have instances of a time, such as in Figure Two, where only one pilot subcarriers are transmitted and subsequently received.

Defendants also had an argument that Claim 19 contradicts NEO's proposal as a claim differentiation type of argument. And, again, in unrebutted expert testimony, the only record evidence of a POSITA's understanding of these terms, he explains that a time slot could have smaller divisions such as time symbols. So independent Claim 15, the same time slot would be a higher level and you could have two carriers within the same time slot, but not at the same time symbol.

Claim 19 would then provide -- you could, for example, have them at the same time symbol.

I think that's all I have on this, Your Honor. Thank

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you.
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              THE COURT: Who would like to respond on behalf of the
    defendants?
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              Thank you, Mr. LeRoy.
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              MR. LEROY: Good afternoon, Your Honor. This is John
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    LeRoy, if I may briefly respond.
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              THE COURT: Mr. LeRoy, go ahead.
              MR. LEROY: So before we get into the slides, I'd like
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    to talk about the Phillips decision in the Federal Circuits
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    Onbonk construction, that when we're going to construe a claim,
    we don't start with an expert's opinion. We start with the
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    claims and then we look at the specification. And, of course,
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    the Court can also take into account expert testimony, but it
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    cannot be at odds with the specification.
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              And I start there because the first and threshold
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    evidence presented by NEO is its expert extrinsic opinion and I
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    think that's just an important starting point. And I would
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    like to go through the order of the procedure that the Federal
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    Circuit instructed that we do, which begins with a claim.
    if I may share my screen, hopefully this works.
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              THE COURT: So your position is that it should be the
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    plain and ordinary meaning, correct?
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              MR. LEROY: Correct. This is in response to NEO's
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    proposed construction.
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              THE COURT: Yes.
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MR. LEROY: And so looking at the claim -- by the way, Your Honor, the defendants agree with the Court's preliminary construction, just to make that clear on the record.

This slide here that I have before Your Honor shows that what NEO is doing here is not construction, they're not taking a word in the asserted independent claim and interpreting it. They're adding a word. So on the left we have the actual claim language as printed in the patent and on the right we have their proposed construction and, of course, the only new word is "same."

As Your Honor well knows, when we add words to a claim, we're narrowing them because the Federal Circuit has instructed that all claim terms have meaning. So when you add new terms, you inherently narrow the scope of the claim. So when we look at the claim language itself as *Phillips* instructs, we see right at the threshold, we're adding a new word, not necessarily interpreting an existing word.

In this case, to the extent there's, you know, any confusions over whether the word "same" belongs in the independent claims or not, the other claims answer that question, resolve that potential confusion.

Phillips instructs us, again, this is Onbonk, this is the law of the land if we're going to construe patent claims. Phillips states that if a term appears in a dependent claim and in our case, it's dependent Claim 19, we have a presumption

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that that term is not present in the independent claim, which in our case, are Claims 15 and 23.

So we have a presumption that NEO neither acknowledges nor responds to. We do. But I think it's important at the threshold that just looking at the other claims of the patent as *Phillips* instructs, undermines NEO's proposed construction, but beyond the fact that we are entitled to this presumption, which resolves this issue on its own, the actual specification supports the -- supports the presumption. This is not a case where the patent exclusively describes one approach in this case.

The patent does not exclusively state that in all cases both cell-specific and common subcarriers must be transmitted at the same time. NEO cites no controlling evidence of that.

And Figure Two, as we have advanced in our briefing, shows why. It's because the inventors when they wrote this patent, contemplated something broader. So Figure Two, to be specific, is an example of at the same time transmission. So Your Honor, all those vertical arrows are at the same time. And each referenced a P -- and I noticed that my yellow highlighted somehow got mixed up along the way.

But each reference to P there, being a P arrow, if you will, being transmitted at the same time. This example is not limited to one type of P or another type of P. Okay. This is

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broad. This example in Figure Two is broad just like Claim

One. And it does not require -- it requires pilot signals, but

not both types being communicated at the same time.

And if we turn to Figure Five, this is the example that NEO points to. Figure Five is an example that -- and this example does show both common pilot signals. Those are the arrows on the right with the little C on top and cell-specific subcarriers, those have the little S. This Figure Five does show them being transmitted at the same time, but that's not a requirement of the system. The description of this Figure Five never states it's a requirement of the system. And when we look at what the description of Figure Five is talking about, it's something completely different. It's talking about aligning frequency. So granted, this is a snapshot at the same time of one example, but the whole purpose of this figure is just to show that in all cases the common signals align in frequency, they're directly above each other. And in some instances, the cell-specifics don't align. They're not necessarily above each other. But that's a frequency issue, not a timing issue.

So in addition to the fact that the patent nowhere requires both to be transmitted at the same time, it's a possibility for sure. This figure is directed to an entirely different concept.

Recently, as Your Honor is well aware, the parties

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have submitted petitions for interparties review at the United
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    State Patent and Trademark office, and this patent, the '512
    patent, is one of the patents in which the patent office
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    elected to undertake review. And in doing so, on May 12th of
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    this year, the patent office rejected NEO's proposed
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    construction stating, as defendants do, and as Your Honor has
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    already determined, that the plain language of the independent
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    claims is broader.
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 9
              We don't need to add a new word that expressly narrows
    the claim beyond how they were originally printed.
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              THE COURT:
                         All right.
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              MR. LEROY: I think that's it.
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              THE COURT: So you're at the end of your time here.
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    Did you want to -- I know we have to discuss what you just said
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    on the slide here as our last term, but we'll ferret that out.
15
    I'll say what it is. That's the 15th term we been dealing with
16
    here. It's also from the same '512 patent found in the same
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    claims and the phrase is, "Second pilots of a second type."
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    And that is a praise that plaintiff asking the Court to
    construe.
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              So who would like to address this for the plaintiff?
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                          Thank you, Your Honor. This is Hamad
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              MR. HAMAD:
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    Hamad again for NEO.
              THE COURT:
                         Go ahead.
24
                          Thank you. May I briefly respond to one
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              MR. HAMAD:
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point on the last term, Your Honor? 1 2 THE COURT: You may. Thank you. There was a statement that we MR. HAMAD: 3 didn't address claim differentiation. Again, our reply, 133 at 4 13, 14, Mr. Alberth's declaration, paragraph 49, we had it up 5 on the screen. So I don't understand why that -- I guess 6 understanding of our position was taken, but that's something 7 that we did address. 8 9 On Phillips we did actually start with the claim 10 language, just like Phillips said. Plain language though is not just as to anyone off the street. It's to a person of 11 ordinary skill in the art. Record evidence is only from NEO on 12 what that term means and the rest of the defendants' arguments 13 14 are just attorney argument. So thank you, Your Honor. I'm ready to proceed to the 15 16 second parlance, if I may. THE COURT: Go ahead, sir. 17 MR. HAMAD: Thank you, Your Honor. The second 18 19 parlance of the second type, the defendant's proposal is essentially a combination of disclaimer and lexicography. And 20 the dispute is whether they have established just the first 2.1 22 threshold step of this claim to get there. We note that the Court's preliminary construction adopts a less restrictive 23 24 characterization of common pilots from the specification. Respectfully, we don't think this disclaimer applies in the 25

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first place, especially that second pilot should be limited to
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    common pilot.
 2
              Sorry. Let me share this with you again.
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         (Document displayed)
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              MR. HAMAD: So this is what I was describing.
                                                              The
 5
    chain language itself doesn't recite the phrase, "common
 6
    pilots." It says "second pilots of a second type." So to get
 7
    from the claim language of second pilots to common pilots,
 8
    defendants' proposal requires that you have disclaimer, such
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    that second pilot to the second pilot are only limited to
    common pilot. Once there, at Step one, their Step Two is then
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    they would need a type of definition or lexicography to insert
12
    a particular description or characterization from the
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    specification. And they just don't meet the threshold question
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    on disclaimer.
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              We've talked about some of these cases, but once again
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    Continental also goes back to Libel Florsheim, even when the
17
    specification describes only a single embodiment and that
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    without more is not a disavow of claim scope. And this is the
    heart of their argument, is that this specification only
20
    describes common pilot and it should be limited to that because
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    of the specification, but that applies in the face of the
22
    Federal Circuit saying otherwise.
23
              We also have --
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              THE COURT: Why are you talking about this?
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MR. HAMAD:
                         I'm sorry?
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 2
              THE COURT:
                         The second pilots of a second type meaning
    what? What are they? If they're not common, what are they?
 3
              MR. HAMAD: They can be common. We have expert
 4
    testimony on this explaining that a person of ordinary skill in
 5
    the art would understand that other noncell specific pilots
 6
    could be used alongside cell-specific pilots and it gives two
 7
    examples, the antenna specific pilots and mobile station
 8
    specific pilots. And the specification, I don't have it on
10
    this, but this specification also described the extension of
    this system into an area with multiple antennas. And so,
11
    again, that would be consistent with Mr. Alberth's declaration
12
    that a person with ordinary skill in the art would understand
1.3
    that there's other noncell specific, noncommon pilots that
14
    could be used with their invention.
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              That's all I have on this term, Your Honor. Thank
16
    you.
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              THE COURT: Very good.
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19
              And who would like to address this for the defendants?
              MR. LEROY: Your Honor, if I may, John LeRoy for the
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    defendants on this term.
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              THE COURT: Go ahead.
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                          So just like Phillips instructs, Your
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              MR. LeROY:
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    Honor, the defendants start with the claim language itself. As
    the Court is well aware, the claim defines the first type of
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cell-specific, but then we have the second type, and based on
the language of the claim, we know at least one thing, whatever
that second type is, it can't be cell-specific.
         THE COURT: Okay. Thank you. Just to tell you,
you've got six minutes. So go ahead.
         MR. LeROY: Thank you, Your Honor. If it's not
cell-specific, then it's inherently cell-common. Consistent
with Your Honor's preliminary construction, the second type is
common to a group of cells or at least two or more cells.
         THE COURT: What do you have to say about what
Mr. Hamad was just saying regarding antenna specific or
global -- I think we said base station or specific or stuff
like that.
         MR. LeROY: Right. Thank you, Your Honor. Once again
he's citing expert testimony, extrinsic evidence about examples
that are not stated in the specification. If the specification
had actually recited the examples alternatives, if you will,
that their expert cited, this would be a very different
conversation.
         But in contrast to actually reciting other examples,
this specification doesn't. As I think is undisputed, this
specification discloses only two types of pilot signals, the
common -- I'm sorry. The cell specific recited in their
previous limitation and then these common pilots. But beyond
just describing them or mentioning them, the patent
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consistently -- and we have four examples on the screen before Your Honor -- describes common pilot subcarriers or common pilot signals as an aspect of the invention. These are not possibilities, options. This is the invention. This is not beyond ubiquitous. It's in the title, the abstract. And I think almost every example or other -- I'm sorry. Every recitation of common pilot is not an example but it is the invention. And the cases that we've heard talked about today, the Continental case and also NEO's counsel referenced the Libel Florsheim case, those are two federal circuit cases that each do concern reference to the invention, but they are not this. In the Continental case, which has been identified several times today, there open-ended terms were used. You know, one technique is an example. The invention may be implemented, using the word term may or can be implemented, can be. We don't have may and can be in the '512 specification. We have definitive, declarative, the invention. So in a nutshell, Your Honor, the intrinsic record, the intrinsic evidence here is clear and unwaivering and would trump any extrinsic evidence identifying examples that this patent never contemplated.

We cite the same issue, which is how does the federal circuit treat the usage of the invention in the context of

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claim construction. We have five examples here that we think
align with the facts of our case unlike the facts of the two
cases that NEO has cited and presented in the slides.
         And if Your Honor doesn't have any questions, I think
that is all I have.
         THE COURT: Thank you, Mr. LeRoy. I appreciate that.
         And is there any rebuttal from Mr. Hamad?
         MR. HAMAD: Yes, Your Honor. Two brief points. The
first point is the term "pilots" is a term of understood in the
art. It's understood to a person of ordinary skill in the art.
So they would also understand that there are different types of
pilots. The only record evidence comes from Mr. Alberth's
declaration. They chose not to rebut it.
         Phillips itself says when you are looking at a term,
you are looking at it in the context and understanding of a
person of ordinary skill in the art.
         I want to comment on the specification excerpt
because --
         THE COURT: Can I just? So how is anybody supposed to
know what is meant by pilots of a second type? In the first
type it's so specific. So you just want pilots of a second
type to be completely open-ended with no understanding
whatsoever as to what it is not even that it's for common
pilots.
         MR. HAMAD: I don't think I would agree with that
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respectfully, Your Honor. One, it could contemplate and put in
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    common pilots for sure. But then also a person of ordinary
    skill in the art would understand, as the specification
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    describes, these inventions are not in a vacuum.
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    described in the context of these particular wireless networks
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    like OFDMA. And there are specifications in the art and
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    background cited on the face of the patent that describes
 7
    different kind of pilots that are not limited to just common
 8
    pilots.
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              And we have an expert in the field explaining that
    from a perspective of a person of ordinary skill in the art
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    there are at least these two other examples. Antenna specific
12
    and at mobile station specific pilots. And then at least with
13
    respect to antenna specific, it also is consistent and aligned
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    with the specification's description of the extension of the
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    invention into multiple antenna system.
              So it's not just kind of completely open-ended, but a
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    person of ordinary skill in the art would understand, and our
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    position is, would not be limited to a just common pilot.
              MR. LeROY: Your Honor, if I may respond briefly?
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              MR. HAMAD: Your Honor, if I may finish my rebuttal?
                         Yes, Mr. Hamad, you may finish.
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              THE COURT:
                          Thank you.
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             MR. HAMAD:
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              The specification excerpts that were put on
    defendant's slide they said things like "aspects of this
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invention, aspects of the invention." It was not the invention, all embodiments of the invention.

And the *Continental* case included arguments from defendant that there were descriptions and disclosures of the present invention and even that to the federal circuit was not enough. The cases that they cite we had actually addressed in our reply brief but those are disclaimer cases. Verizon, in particular, was distinguished in *Continental*.

Thank you, Your Honor.

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THE COURT: Thank you.

Okay. And so, Mr. LeRoy?

MR. LeROY: Thank you, Your Honor.

Just to pick up on the last point that was made. Our specific- -- the '512 specification does indeed describe the common pilot signal as an aspect of the invention, but it is just that, an aspect of the invention. There may be other aspects, but in all cases the invention includes that aspect.

But, Your Honor, in questioning NEO's counsel raised a very important point and that is the public notice function of patents and patent claims.

You know, the public is going to review the intrinsic record to understand what the claims say and how they arise in the context of the written description. Here we have an expert who citing nothing at all, not citing prior art on the face of the patent, we have an expert who identifies other potential

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signals not described in the patent and this is the first I've ever heard that there are prior art references cited on the face of the patent that might support the construction.

I don't know if there are or there aren't because that has not been a part of this record to my knowledge. It has not been a part of the briefing or the expert analysis.

But even if it was true, which reference? How is the public to know that it's supposed to talk to NEO's expert or which prior art reference it's supposed to read to figure out the scope of the claim. That's why *Phillips* puts extrinsic evidence at the bottom.

Thank you, Your Honor.

THE COURT: Thank you. And our official timekeeper,
Mr. Weissburg indicates that you have used up almost all of
your time. I think you had about maybe 10 seconds left for the
defense side. So very good.

And the plaintiffs, I think, might have had a little bit more time than that, but they have perhaps were just a little bit more economical in their presentations.

So I think that covers everything that we have with respect to all of the claims that were before the Court for the construction. And let me just confirm that, Mr. Stewart, do you think we have covered everything that we need to cover?

MR. STEWART: If you'd like to revisit any term, I'd be happy to wax poetic a little longer, but otherwise I think

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we have covered everything. THE COURT: Okay, thank you. And I don't think it's necessary in light of everything you have said already and all also all the briefing that we have and the matters that are on the record. And so all of that is taken into account in making this decision. And so on behalf of the defendants, is there anything defendant that believes there is anything else that we are supposed to cover that we have not covered during our hearing. MR. HERRIGES: Nothing further, Your Honor, from defendant's perspective. THE COURT: Thank you, sir. Very good. All right. So I want to thank counsel for your presentations today. All of you have made your oral arguments. It's been very helpful to the Court. I know that this is complicated material. Perhaps not as complicated to you as it is to me, but I have enjoyed hearing from you trying to grapple with all of this and continue to do so. I'll take this under advisement for now and we will issue an order that will construe these terms that the parties have requested. So is there anything further that we need to address or can we be adjourned?

I don't see anybody indicating that there's anything

further. Then I will ask Mr. Weissburg to go ahead and recess

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the court and give my thanks to all of you for all of your hard
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    work you put into the case.
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              THE LAW CLERK OF THE COURT: The Court is now in
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    recess.
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           (At 1:29 p.m., matter concluded.)
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<u>C E R T I F I C A T</u> E I, Darlene K. May, Official Court Reporter for the United States District Court, Eastern District of Michigan, do hereby certify that the foregoing is a true and correct transcript, to the best of my ability, from the record of proceedings in the above-entitled matter. I further certify that the transcript fees and format comply with those prescribed by the Court and the Judicial Conference of the United States. July 5, 2023 /s/ Darlene K. May Darlene K. May, CSR, RPR, CRR, RMR Date Federal Official Court Reporter Michigan License No. 6479